"A CLINICAL STUDY ON THE ROLE OF HOMOEOPATHIC MEDICINE IN MANAGING NOCTURNAL ENURESIS IN CHILDREN"

A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT

FOR THE AWARD OF THE DEGREE OF

DOCTOR OF MEDICINE IN HOMOEOPATHY: M.D. (Hom.)

IN

PAEDIATRICS

By

Dr. RAVEENA R LEKSHMI

Under the guidance of

Dr. C.K MOHAN M.D (Hom.)

Professor

Department of Paediatrics

SARADA KRISHNA HOMOEOPATHIC MEDICAL COLLEGE,
KULASEKHARAM, KANYAKUMARI DISTRICT,
TAMIL NADU

SUBMITTED TO

THE TAMILNADU Dr. M.G.R. MEDICAL UNIVERSITY, CHENNAI

2019

ENDORSEMENT BY THE HEAD OF THE DEPARTMENT AND THE INSTITUTION

This is to certify that the dissertation entitled " **A CLINICAL STUDY ON THE ROLE OF HOMOEOPATHIC MEDICINE IN MANAGING NOCTURNAL ENURESIS IN CHILDREN"** is a bonafide work carried out by **Dr. RAVEENA R LEKSHMI**, a student of M.D (Hom) in **DEPARTMENT OF PAEDIATRICS** in the **SARADA KRISHNA HOMOEOPATHIC MEDICAL COLLEGE** under the supervision and guidance of **Dr. C.K. MOHAN** B.sc, M.D (Hom) chairman in partial fulfilment of the regulation for the award of the degree of **DOCTOR OF MEDICINE (HOMOEOPATHY)** in **PAEDIATRICS**. This work confirms to the standards prescribed by **THE TAMILNADU DR. M.G.R MEDICAL UNIVERSITY, CHENNAI.**

This has not been submitted in full or part for the award of any degree or diploma from any university.

Dr. P.R. SISIR M.D (Hom)
HOD, Dept. of Paediatrics

Dr.N.V.SUGATHAN.M.D (Hom)
PRINCIPAL

PLACE: KULASEKHARAM

DATE:

CERTIFICATE BY THE GUIDE

This is to certify that the dissertation entitled **"A CLINICAL STUDY ON THE ROLE OF HOMOEOPATHIC MEDICINE IN MANAGING NOCTURNAL ENURESIS IN CHILDREN"** is a bonafide work of **Dr. RAVEENA R LEKSHMI**. All her work has been carried out under my direct supervision and guidance. Her approach to the subject has been sincere, scientific, and analytic. This work is recommended for the award of degree of **DOCTOR OF MEDICINE (HOMOEOPATHY)** in **PAEDIATRICS** of **THE TAMILNADU DR.M.G.R. MEDICAL UNIVERSITY, CHENNAI**

Place:

Date:

Dr. C.K.MOHAN M.D. (Hom)
Professor
Dept. of Paediatrics

DECLARATION

I, **Dr. RAVEENA R LEKSHMI** do hereby declare that the dissertation entitled **"A CLINICAL STUDY ON THE ROLE OF HOMOEOPATHIC MEDICINE IN MANAGING NOCTURNAL ENURESIS IN CHILDREN"** is a bonafide work carried out by me under the direct supervision and guidance of partial fulfilment of the regulation for the award of degree of **DOCTOR OF MEDICINE (HOMOEOPATHY)** in **PAEDIATRICS** of The Tamil Nadu Dr. M.G.R. Medical University, Chennai. This has not been submitted in full or part for the award of any degree or diploma from any university.

Place: Kulasekharam **Dr. RAVEENA R LEKSHMI**

Date:

ABSTRACT

AIM

Nocturnal enuresis is common chronic disease in children. It is described in ICD 10 CM code N39.44. The populations undertaken for this study are students with discharge of urine during sleep at night after expected development of urinary control. The amount of urine produced overnight can be more than the bladder can hold.

METHODS AND MATERIAL

The study was conducted in a systemic way so as to achieve the aim and objectives of the study. A sample of 30 cases were selected from OPD, IPD and rural centers of Sarada Krishna Homoeopathic Medical College. The children were screened by score chart. The cases identified with nocturnal enuresis were selected as per inclusion and exclusion criteria. Data collected were recorded in the pre structured SKHMC standardized case record. Cases were processed according to the homoeopathic principles followed by case analysis, evaluation and totality were constructed. Prescriptions were done with reference to Repertory, Materia Medica and Organon of Medicine. Potency selection and repetition were done according to the demand of each case. Improvement assessed by score chart. During the follow up after 6 months. Pre and post assessment analysis was done. Observations were recorded, before treatment scores were compared with after treatment scores and paired “t” test was done to study the role of homoeopathic medicines in managing nocturnal enuresis in children.

RESULT:

After the assessment of the study 8 patient of 26.6% of age 5. 3 patient of age 6 with 10%, 2 patients of 6.6%with 7 years old, 1 patient of 3.3% of 8 years old,4 patient of 13.3% with 9 years old,3 patient of 10% of 3 years old 1 patient of 3.3% of 11 years old, 2 patients of 6.6% with 12 years old,2 patients of 6.6% of 13 years, 2 patients of 6.6% with 14 years old, 2 patients of 6.6% with 15 years old.

In the study, the probable cause of patient with natal cause are 5 with 16.6 percent.in environmental cause the number of patient are 15 of 50 percentage. In unknown cause the number of patient are 10 and its percentage are 33.3.

The patient with primary type are 15 patient with 50% and the patient with secondary type are 15 patient with 50%.

Homoeopathic medicines seen effective were Calcarea carb, Natrum mur and ,Calcarea phos, Silicea, Nux vomica, Calcarea ars, Tuberculinum, Pulsatilla, Lycopodium, Arsenicum album, phosphorus, Sulphur, sepia, belladonna, Tarentula, Medorrhinum as a constitutional medicines.

CONCLUSION:

Homoeopathic medicine is effective in mananging nocturnal enuresis in children on comparison of before and after treatment based on score chart

Key Words: Nocturnal Enuresis, Children, Homoeopathy

DEDICATED

TO

MY PARENTS

ACKNOWLEDGEMENT

With a devoted heart, I thank ***Almighty God*** *whose grace strengthens me to complete this work with maximum involvement.I express my sincere thanks to my guide* ***Dr. C. K. MOHAN B.SC., M.D. (Hom.)****, chairman, Sarada Krishna Homoeopathic Medical College, Kulasekharam, for the valuable thoughts, guidance and suggestions given throughout the period of study.I convey my respectful regards to* ***Dr.P.R.SISIR,M.D.(Hom)*** *Head Of The Department And Professor. Sarada Krishna Homoeopathic Medical College, Kulasekharam for providing the opportunity to study in this Institution and for providing necessary facilities in the making of this work.I am thankful to* ***Dr. N.V.SUGATHAN M.D. (Hom.),*** *Medical Superintendent and principal.****Dr. WINSTON VARGHEESEM.D. (Hom.),*** *P.G coordinator, Sarada Krishna Homoeopathic Medical College, Kulasekharam for their support throughout my study.I am thankful to* ***Dr.SIJU.V*** *M.D.(Hom)(Head of department of Forensic medicine and toxicology and Head of learning disability unit)* ***Mr.VIJILAN.P.V*** *D.Ed SE (MR)., B.Ed SE (MR).,M Ed SE (MR).Osmania University,(SARS),MA (Child Care &Edu). ,MA (MC & JR).,MBEH., BSc Psy., MSc Psy., M.Phil Rehabilitation Psychology. Osmania University (NIMH).****Dr.RESHMA RAGHU****,M.D(Hom)medical officer of learning disability unit.and also I thank* ***Mr.THANA SHEKAR.B.O.T,D.R(O.T) AND Mrs.ANITHA****. I express my sincere thanks to the Directors, chief medical officers* ***Dr. RAMASUBRAMANYOM MD (PAED)****, and* ***DR. PRADEEP*** *other Medical Officers and Staffs of Gerdi Gutperle Agasthiyar Muni Child Care Center, Vellamadam, for their kind support during my curriculum. I also extend my thanks to* ***Dr. JAYA GAUTHAM MD(PAED)*** *for her support during my curriculum. And* ***Dr.JAYARAMAN M.D.(Hom).***

I would like to extend my thanks to my teacher ***DR. C.V. CHANDRAJA*** *for their timely support and encouragement. I express my heart full thanks to my respected and beloved teacher* ***Dr. A. S. SUMAN SANKAR, M.D.(HOM.)****, Department of Repertory, for his timely support and sensible advices during my curriculum and dissertation work. I express my heart full thanks to my beloved teachers* ***Dr. SREEVIDHYA, M.D (Hom.), Dr. A.L. MAHADEVI,M.D.(Hom)*** *and* ***Dr. BENCITHA HORRENCE MARY, M.D. (Hom.),Dr.BHINDHUSARAN,M.D (Hom)*** *for their timely support and encouragement. It is my duty to express my sincere thanks to all my kind teachers who lit the lamp of knowledge in me.I express my thanks to librarians and all college staffs for providing the ample support in the collection of the data and towards the preparation of the work. I am thankful to all the registration staff and other hospital staff of our hospital, especially the valuable support they had provided in the completion of this work.*

I also extend my thanks to all my batch mates, my colleagues ***Dr. REVATHI.T.R., Dr.ABHIJITH RANJAN.S., Dr.VINEETHA SREEKUMAR., Dr.CHINJU G.S. AND Dr.SOWMYA GOPAL*** *lovable friends, seniors, juniors, interns and all my well-wishers for their prayers and immense support.*

I extend my sincere love and gratefulness from the bottom of my heart to ***Dr. KAUSALYA.G*** *for her guidance, support and for providing me all the materials which are needed for the study.I express my heartful thanks to the management, principal and staff of* ***ST.MARYS HIGHER SECONDARY SCHOOL, KALIYAL*** *for their immense support to conduct this study. I also extend my prayers and thanks to all patients and their parents who had participated in the study. Finally, I would like express my love and gratitude to my dear Father Mr.K.V.RAVEENDRAN NAIR,DEO/Coimbatore,Mother Mrs. L.NIRMALA, Brother Mr. RAVI R SHANKAR,Aviation Pilot,USA who has supported me throughout my studies. I extend my sincere love and greatful from the bottom of my heart to my Husband Mr. LIPINRAJ M P IRS.*

Dr. RAVEENA R LEKSHMI

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF ABBREVIATIONS USED

SL. NO.	ABBREVIATION	EXPANSION
1.	%	Percentage
2.	<	Aggravation
3.	>	Amelioration
4.	Dr	Doctor
5.	F	Female child
6.	M	Male child
7.	H/O	History of
8.	Mnths	Months
9.	No.	Number
10.	OPD	Outpatient department
11.	IPD	In patient department
12.	Wks	Weeks
13.	Kgs	Kilograms
14.	i.e.,	That is
15.	eg.	Example
16.	^{0}	Degree Celsius
17.	Σ	Sum
18.	Sl.No.	Serial Number
19.	HTN	Hypertension
20.	NR	Nothing Relevant

LIST OF APPENDICES

1.0. INTRODUCTION:

Wellbeing of a kid's health, will be a deciding for a nation's future. A repeated inability to control certain actions of a involuntary medical condition can be treated by certain systems of medicines but among them role of homoeopathy has predominantly grown nocturnal enuresis also called bedwetting which is medically defined as night time incontinence which is a involuntary urination while asleep during childhood can be treated with homoeopathic systems of medicine. The medical condition of enuresis has derived from a Greek word "enourein" which means a condition to void urine Greeks found that bedwetting can occurred either daytime or night and its related enuresis can create difficult situation for children and their families of the child's ages, but it can be treated with clinical intervention of homoeopathy. Other systems of medicine has proposed motivational therapy, counselling, enuresis alarms, but this can be treated effective through a proper analysis and understanding of children family that medications cannot simply cure nocturnal enuresis but symptoms can be treated by homoeopathic system of medicine. The relevance of a clinical study on the role of homoeopathic medicine in managing nocturnal enuresis has more relevance in homoeopathic system of medicine which requires a thorough understanding, analysis, and advanced research.

The reasons behind nocturnal enuresis can be analysed from various aspects duly linking various system of medicines or branches of medicines like neurology, psychiatry, pathology, & paediatric urology. Though Indian data on nocturnal enuresis with regard to reporting of cases at hospitals is very low. A recent report shows that nocturnal enuresis higher among male children than females. The missing step while treating nocturnal enuresis is then lack of proper counselling to parents and the affected child about the medical condition including associated factors duly motivating them that it can be cured in a phased manner.

One of the effective strategies to manage this medical condition is alarm therapy which is having low exposure in Indian medical system. This impirical study covers the diagnosis and management of nocturnal enuresis and suggesting few remedial measures available under homoeopathic system of medicine.

1.1.BACKGROUND AND NEED FOR THE STUDY:

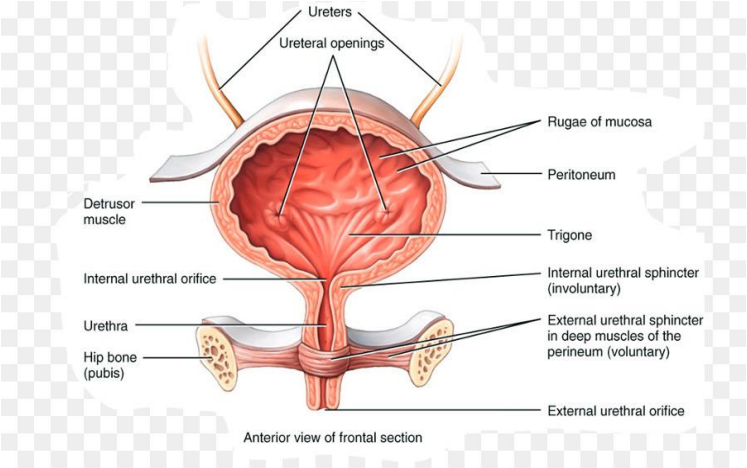
The prevalence of nocturnal enuresis is increasing day by day and is a common cause of disease in children. Nocturnal enuresis is common chronic disease in children. It is described in ICD 10 CM code N39.44. The populations undertaken for this study are students with discharge of urine during sleep at night after expected development of urinary control. The amount of urine produced overnight can be more than the bladder can hold.

2.0.AIMS AND OBJECTIVE

- To study the effectiveness of homoeopathic remedies in managing nocturnal enuresis in children.
- To study the changes in nocturnal enuresis before and after the administration of homoeopathic remedies.
- To analyse the constitutional remedies for nocturnal enuresis in children.

3.0. REVIEW OF LITERATURE

3.1.ANATOMY OF THE URINARY BLADDER:



Urinary bladder is the temporary store house of urine which gets emptied through the urethra. (1)

The male urethra has the functions of urination and ejaculation, i.e. expulsion of semen 18-20 cm long with curvatures and comprises preprostatic, prostatic, membranes and longest anterior bulbar and penile parts.

The role of female urethra is for urination only and is 4 cm long.

The urinary bladder is the muscular reservoir of urine, lies in the anterior part of the pelvic cavity. The urinary bladder surrounded by detrusor muscle which is arranged in whorls and spirals and is adapted for contraction than peristalsis.

An empty bladder is tetrahedral in shape and has:

- Apex, directed forwards
- Base or fundus, directed backwards
- Neck, lowest and most fixed part of the bladder.

- Three surfaces, superior, and right and left inferolateral
- Four borders, two lateral, one anterior and one posterior.

A full bladder is void in shape and has:

- An apex, directed upwards towards the umbilicus
- A neck, directed downwards
- Two surfaces, anterior and posterior

The apex attach to the umbilicus by the median umbilical ligament and represents the obliterated embryonic urachus.

In females the base is related to the uterine cervix and the vagina, in males upper part is set apart from the rectum by the rectovesical pouch and the contained coils of intestine. The lower part is related to the seminal vesicles and the termination of vas deferens

Lowest part of the neck is fixed to the bladder, which lies 3 to 4cm behind the lower part of the symphysis, just above the plane of the pelvic outlet and is pierced by the internal urethral orifice.

The bladder neck and prostatic urethra are surrounded by smooth muscle bundles mostly seen in males. In females, neck is associated to the pelvic fascia and is surrounded by the upper part of the urethra.

In infants, the bladder is situated at the higher level. The internal urethral orifice lies at the level of the superior border of the pubic symphysis. After puberty, it gradually descends to reach the adult position.

Interior of the bladder:

when the bladder is empty, due to the loose attachment of the muscular coat, the majority part of the mucosa shows irregular folds

The lower part of the base of the bladder which is a small triangular area, the mucosa is smooth and is firmly attached to the muscular coat. This area is known as the trigone of the bladder and is directed downwards and forwards.

Capacity of the bladder:

The average capacity of the bladder of adult male is about 220ml, it may vary from 120 to 320ml. Filling above 220ml causes desire to urinate. Usually the bladder is emptied when the urine is filled above 250 to 300ml. Upto 500 can be tolerated, beyond 500ml it becomes painful. Referred pain can be felt in the lower part of the anterior abdominal wall, perineum and penis (T11 to l2; S2 to S4).

Arterial supply:

The main supply comes from the superior and inferior vesical arteries and the branches of anterior trunk of the internal iliac artery

Additional supply from the obturator and inferior gluteal arteries. Instead of interior vesical,

In females the supply comes from the uterine and vaginal arteries.

Venous drainage:

Vesical venous plexus lying on the inferolateral surfaces of the bladder. Veins from the plexus pass backwards in the posterior ligaments of the bladder and drain into the internal iliac veins.

Lymphatic drainage:

Lymphatics from the urinary bladder windup in the external iliac nodes. Few lymphatics pass to the internal iliac nodes or to the lateral aortic nodes.

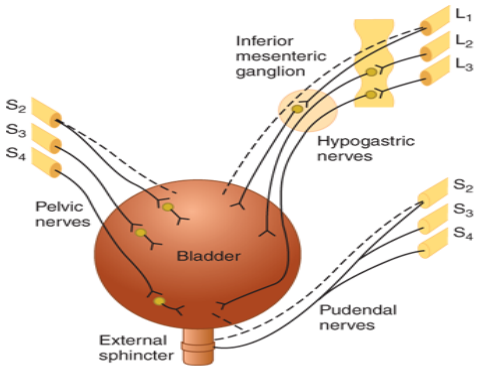
URETERS:

The ureters are a pair of narrow, thick walled muscular tubes which transport urine from the kidneys to the urinary bladder, which lies deep to the peritoneum. Posterior abdominal wall and lateral pelvic wall are closely applied to the upper and lower part. Each ureter is about 25cm long situated in the upper half of the abdomen and the lower half is situated in the pelvis. Each measures about 3mm in diameter, and is slightly constricted at five places.

Normal 5 constrictions are:

- At the pelviureteric junction
- At the brim of the lesser pelvis
- Point of crossing of ureter by ductus deferens or broad ligament of uterus
- During its oblique passage through the bladder wall
- At its opening in lateral angle of trigone

3.2.PHYSIOLOGY OF BLADDER:



Micturition is defined as the process by which the urinary bladder empties. It involves two steps:

(1) The bladder fills until the tension in its walls rises above a threshold level.

(2) A nervous reflex or the micturition reflex occurs that empties the bladder, when it fails, it causes a conscious desire to urinate.[(2)]

The body is the major part of the bladder in which urine collects, and (2) the neck, is the funnel shaped extension of the body, passing inferiorly and anteriorly in to the urogenital triangle and it connects the urethra.

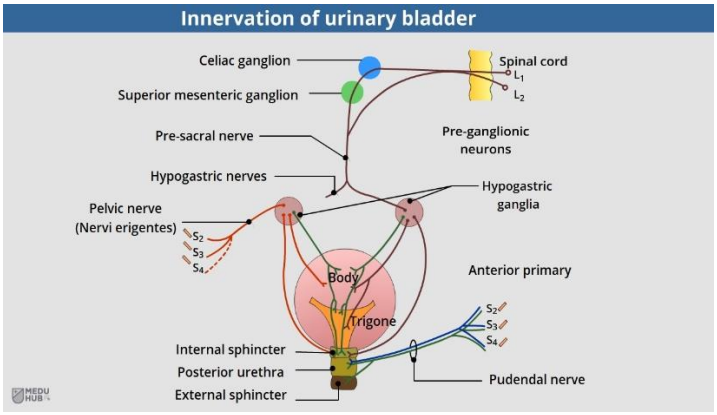
The detrusor muscle is the smooth muscle of the bladder. When the muscle fibres extends or contracted, it can increase the pressure in the bladder up to 40-60mm Hg. Thus, contraction of the detrusor muscle is the step for emptying the bladder.

The bladder neck (posterior urethra) is 2 to 3 centimetres long, and the wall is composed of detrusor muscle connected with a large amount of elastic tissue and the muscle in this area is called the internal sphincter. Natural tone of the internal sphincter normally keeps the bladder neck and posterior urethra empty the urine and

also helps to prevent emptying of the bladder until the pressure in the bladder rises above a critical threshold.

The urethra passes through urogenital diaphragm, and contains layer of muscle called the external sphincter of the bladder, it is voluntary skeletal muscle, the muscle of the body of bladder and neck, contain only the smooth muscle. The external sphincter has the voluntary control of the nervous system and it can help to prevent urination, when involuntary controls are trying to empty the bladder.

INNERVATION OF THE BLADDER:



The sensory fibres perceive the degree of stretch in the bladder wall. Stretch signals from the posterior urethra are strong and are responsible for producing the reflexes that cause bladder emptying.

In addition to the pelvic nerves, two other types of innervation are important in bladder function. The skeletal fibres transmitted through the pudental nerve to the external bladder sphincter. They are the somatic nerve fibres that innervate which control the voluntary skeletal muscle of the sphincter. The bladder also receives sympathetic innervation from the sympathetic chain through the hypogastric nerves, which connects mainly L2 segment of the spinal cord. These sympathetic fibres stimulate the blood vessels and help for bladder contraction. Some of the sensory

nerve fibres pass by the way of the sympathetic nerves and may cause the sensations of fullness and pain.

Urine that is expelled has the same composition as fluid flowing out of the collecting duct; there is no changes in the composition of urine when it flows through the renal calices, ureter or the bladder.

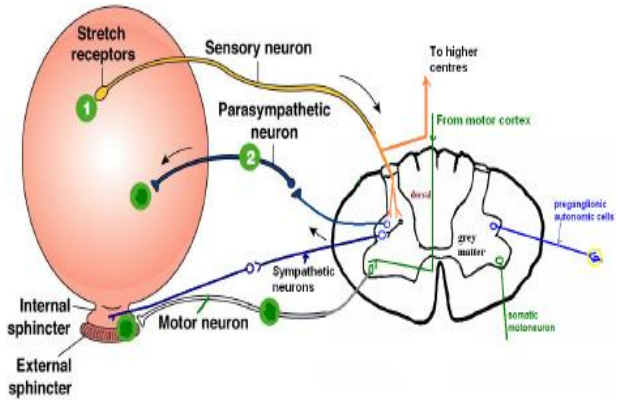
Urine flowing from the collecting ducts enters to the renal calices causes the stretching of the calices and help to increasing the pacemaker activity, this initiates peristaltic contractions that spread to the renal pelvis and downward along the length of the ureter, and forcing urine from the renal pelvis toward the bladder. The walls of the ureters consists of smooth muscle and are innervated by both sympathetic and parasympathetic nerves as well as intramural plexus of neurons and this nerve fibers extends along the entire length of the ureters.

The ureters passes the bladder through the detrusor muscle in the trigone region of the bladder. Normally, the ureters pass obliquely for several centimeters through the bladder wall. The normal tone of the detrusor muscle in the bladder helps to compress the ureter, they also help in preventing back flow of the urine from the bladder and when the pressure increases in the bladder during urination and bladder compression. Each peristaltic wave in the ureter increases the pressure in the ureter and there by the bladder wall opens and allows the urine to flow to the bladder.

In some people, the distance of the ureter passes through the bladder wall is less than the normal, so the contraction of the bladder during urination is not always lead to complete obstruction of the ureter. Some of the urine in the bladder is pushed backward into the ureter, this condition is called vesicoureteral reflux. Such reflux lead to enlargement of the ureters and in severe cases it can increase the pressure in

the renal calices and structures of the renal medulla, it can lead to damage of these structures.

MICTURATION REFLUX:



When micturition reflux begins, it is "self-regenerative". Initial contraction of the bladder activates the stretch receptors it cause increase in sensory impulses to the bladder and posterior urethra. It causes increase in reflex contraction of the bladder and there by the cycle is repeated again and again. The self-regenerative cycle of the micturition reflex stops, and allows the bladder to relax.

The micturition reflex is a complete cycle of:

(1) Progressive and rapid increase of pressure

(2) A period of sustained pressure, and

(3) Return of the pressure to the basal tone of the bladder.

When micturition reflex occurred but not reached in emptying and remain in an inhibited state for few minutes or 1 hour or more before another micturition reflex occurs. As the bladder becomes more and more filled, micturition reflexes occurs more and more powerful.

When the micturition reflex becomes powerful, it lead to another reflex, which transmit through the pudendal nerves to the external sphincter to terminate it. If this inhibition is more powerful in the brain than the voluntary constrictor signals to the external sphincter, micturition occurs. If it is not occurred, urination will not occur until the micturition reflex becomes more powerful.

Facilitation or inhibition of micturition by the brain:

The micturition reflex is a completely autonomic spinal cord reflex, but it can be inhibited or promoted by centers in the brain. These centers include (1) strong facilitory and inhibitory centers in the brain stem, located mainly in the pons, and (2) several centers which is located in the cerebral cortex are mostly inhibitory but can become excitatory.

The micturition reflex is the main cause of micturition, but the higher centers which are responsible for the control of micturition are as follows:

- The higher centers responsible for the micturition reflex partially inhibited when micturition is desired.
- The higher reflex are not occured, by continuous tonic contraction of the external bladder sphincter until the time occurs.
- For the process of micturition to occur, the cortical centers can facilitate the sacral micturition centers to help initiate a micturition reflex and along with that it inhibit the external urinary sphincter and the urination can occur.

Voluntary urination occurs as follows:

When the person voluntarily contracts abdominal muscles, it causes increase in pressure of the bladder and thereby it allows extra urine to enter the bladder neck and posterior urethra causes the stretching of bladder walls. It stimulates the stretch

receptors excites the micturition reflex and it also inhibits the external urethral sphincter. Thus all the urine in the bladder is emptied.

ABNORMALITIES OF MICTURITION:

Atonic bladder caused by destruction of sensory nerve fibres:

If the sensory nerve fibers from the bladder to the spinal cord are damaged, the micturition reflex contraction doesn't occur, thereby stretch signal from the bladder to the spinal cord doesn't occur. The person loses bladder control, intact neurogenic connections within the brain when it occurs. Instead of emptying periodically, the bladder fills to capacity and overflows a few drops at a time through the urethra, which is also called as overflow incontinence.

The common cause of atonic bladder is the injury to the sacral region of the spinal cord.

The automatic bladder caused by spinal cord damage above the sacral region:

When the spinal cord is damaged above the sacral region and the sacral cord segments remain intact, typical micturition reflexes can still occur even though they are not controlled by the brain. After the damage of the cord, the micturition reflexes are suppressed and causes the loss of impulse from the brain stem and cerebrum due to the spinal shock. When the bladder is emptied by catheterization to prevent bladder injury, the excitability of the micturition reflex increases, until the micturition reflex return, then the emptying of the bladder occurs.

The uninhibited neurogenic bladder caused by lack of inhibitory signals from the brain:

Another abnormality of micturition is also called uninhibited neurogenic bladder, which results in frequent uncontrolled micturition. This condition results from partial damage in the spinal cord or the brain stem that affects the inhibitory signals.

DIURETICS AND THEIR MECHANISMS OF ACTION:

A diuretic is a substance which increases the rate of urine volume output. Diuretics helps to increase the excretion of solutes, especially sodium and chloride. Most diuretics that are used for decreasing the sodium reabsorption from the tubules, that causes natiuresis (increased sodium output), and it can also causes diuresis (increased water output). In most of the cases, increased water output occurs secondary to inhibition of tubular sodium reabsorption because sodium remaining in the tubules acts osmotically to decrease water reabsorption. Because of the renal tubular reabsorption many solutes such as potassium, chloride, magnesium, and calcium influenced secondarily by sodium reabsorption, and diuretics also helps to raise renal output of these solutes.

Some diuretics can increase urine output within a few minutes after they are administered. However, the effect of most diuretics on renal output of salt and water subsides within a few days. This is due to activation of other compensatory mechanisms initiated by decreased extracellular fluid volume. For example, a decrease in extracellular fluid volume reduces arterial pressure and glomerular filtration rate (GFR) and increases renin secretion and angiotensin II formation; all these responses together, affect the chronic effects of the diuretic on urine output.

Thus urine output is equal to intake, but after reduction in arterial pressure and extracellular fluid volume have occurred, which relieve the hypertension or oedema.

3.3.IMPACT OF NOCTURNAL ENURESIS:

Bed wetting is a distressing disorder that causes burden for the child and their family. Half of children are disturbed by their peers, feeling of bewilderment and humiliation who wet their bed. Low self- esteem results from tension in families, social marginalisation and treatment failure. The study examining the psychological impact of bedwetting found that primary school aged children are mostly distressed. Divorce and parental fighting are the two distressing events that affect the children. Low self-esteem and sleep disturbance are mostly seen in bedwetting group children. Research shown that that the concern of parents is the impact of child's emotional and social development.[3]

3.3. NOCTURNAL ENURESIS

3.3.1. DEFINITION

The term enuresis, denotes occurrence of involuntary voiding of urine after the age at which volitional bladder control attained.

Enuresis may be diurnal or nocturnal. Lack of bladder control occurs during waking hours. Is not consider as abnormal if it occurs less than twice a week. After toilet trained for several years, some children occasionally wet themselves since they are preoccupied with play and postpone emptying the bladder. Anxiety of the parents are common cause for Nocturnal diuresis.

Enuresis may be primary or secondary. Primary enuresis means that the child has never been able to control voiding during night. This is also termed "persistent enuresis". Secondary or regressive enuresis means that wetting occurs after the child has attained the normal bladder control. The persistent enuresis is the cause of poor toilet training. Parental quarrelsomeness, arrival of a sibling, or a family tragedy is the precipitating factor for regressive enuresis. Organic pathology found in small proportion in both types of enuresis.

Detailed interview with the parents as well as the enuretic child help to find out the history of the problem, and precipitating emotional factors. It also include other information like child's fluid intake and urinary output. Is there any history associated with fever or dysuria? Is there any worm infestation.

Physical examination should include examination of the abdomen (check for distended bladder and rectal impaction), rectum, genitalia (identify signs suggestive of sexual abuse which may be the cause of secondary/ persistent enuresis), ears, nose, and throat. Secondary enuresis can be identified by testing for serum glucose, blood

urea nitrogen, and creatinine levels and low thyroid – stimulating hormone levels.[4]

PRIMARY (PERSISTENT) ENURESIS:

Poor toilet training:

Mismanagement of toilet training, especially when the child is at the stage of maturation enables him to control micturition, can delay the developmental habit of control, causing enuresis.

Familial:

In some families, enuresis occurs as a familial trait. There is delay in the maturation of the relevant components of the CNS. Hence, children are late in attaining bladder control.

Anatomical defects:

Such anatomical anomalies as bladder-neck or urethral obstruction, urethral obstruction, ectopic ureter entering the vagina, diverticulum of the anterior urethra, sacral agenesis etc. May infrequently be responsible for primary enuresis.

Mental retardation:

Like delay in walking and talking, a mentally subnormal is likely to acquire bladder control significantly late. Understandably, this is related to the delayed maturation of the nervous system.

Emotional deprivation:

An emotionally deprived child, particularly if he is brought up in an orthodox type of institution, is likely to suffer from delayed acquisition of bladder control.

SECONDARY (REGRESSIVE) ENURESIS:

Psychological:

Secondary enuresis is often a manifestation of family conflict and maladjustment, e,g. too strict parents, rejection, sibling, rivalry, quarrelsomeness between the parents, problems at school, acute anxiety etc.

Worm infestation:

Heavy threadworm infestation (enterobiasis or oxyuriasis) is frequently associated with enuresis. Eradication of the infestation leads to regression in frequency of enuresis and in some even full recover from it.

Metabolic disorders:

Enuresis may be the first manifestation of diabetes mellitus or diabetes insipidus in a child who had till been dry. The child with diabetes mellitus may also suffer from such additional manifestations as excessive thirst (polydypsia), polyuria, excessive hunger (polyphagia), weight loss, general weakness, tiredness and bodily pains. Fainting attacks due to spontaneous hypoglycaemia, vulvitis, abdominal pains, nausea and vomiting, irritability and deterioration in school performance. In diabetes insipidus, enuresis is accompanied by polydipsia and polyuria.

Neurogenic bladder:

Congenital conditions such as meningomyeloceic, lipomeningocele, sacral agenesis, or other spinal abnormalities may cause neurogenic bladder and resultant enuresis. Cerebral palsy, CNS tumors, repair of imperforate anus or excision of sacrococcygeal teratoma may lead to abnormal innervation of bladder and sphincters, resulting in urinary incontinence.

Urinary tract infection:

Urinary tract infection is another cause of secondary enuresis, which is accompanied by fever and dysuria.

CONSEQUENCES:

- The enuresis can be prevented or controlled by self correction even though it is benign disorder.
- Individual patient may suffer psychological stress and feelings of low self esteem, inferiority complex and constant fear.
- Families of bedwetter face disturbed sleep, turmoil, anger with irritability.

3.3.2.EPIDEMIOLOGY:

Numerous studies report varying but high prevalence of the condition in other members of patients with enuresis. According to the highest reported familial prevalence rates, 56% of fathers, 36% of mothers, and 40% of siblings experience a problem with enuresis. Enuresis is reported in 43% of children of enuretic fathers, 44% of enuretic mothers, and 77% of children when both the mother and father had enuresis. A family history of bedwetting is found in approximately 50% of children with SE.

The worldwide prevalence of enuresis among children aged 6-12 years is 1.4% - 28%. Indian data on incidence and prevalence are very limited. In general, prevalence of nocturnal enuresis is higher among male children than female children. The prevalence in India is 7.61% - 16.3%. The prevalence in children aged 11 – 12 years (8-10years). Nocturnal enuresis has been reported in 18.4% of children with sleep problems from a single center in India.

In rural areas in India, the prevalence is higher among socioeconomic class compared to those from the upper middle class. A family history of enuresis has been identified in enuretic children from both rural and urban areas. Other risk factors include living with a single parent, living with stepparents, parents with health problems, conflicts at home, stress due to enuresis, scolding and poor scholastic performance. More enuretic children have a history of birth asphyxia, caesarean birth, low birth weight, and absence of breast feeding.

Genetics plays a role in nocturnal enuresis. Children of parents with a history of bedwetting have high risk of having bedwetting. The ENUR1 Gene involve in the pathophysiology of enuresis. Children with attention deficit/ hyperactivity disorder (ADHD) have high risk compared to those without ADHD. Inadequate arousal impair secretion of vasopressin, or vasopressin deficiency may impair arousal. [5]

3.3.3.DIAGNOSTIC CRITERIA:

DIAGNOSIS:

ICD – 10 – CM code N39.44

Intermittent incontinence of urine while sleeping, regardless of whether intermittent daytime urinary incontinence also present or not. Involuntary discharge of urine during sleep at night after expected age of completed development of urinary control. Many children wet the bed until they are 5 or even older. A child's bladder might be too small. Or the amount of urine produced overnight can be more than the bladder can hold. Some children sleep too deeply or take longer to learn bladder control. Children should not be punished for wetting the bed. They don't do it on purpose, and most outgrow it. Until then, bedwetting alarms, bladder training and medicines might help.

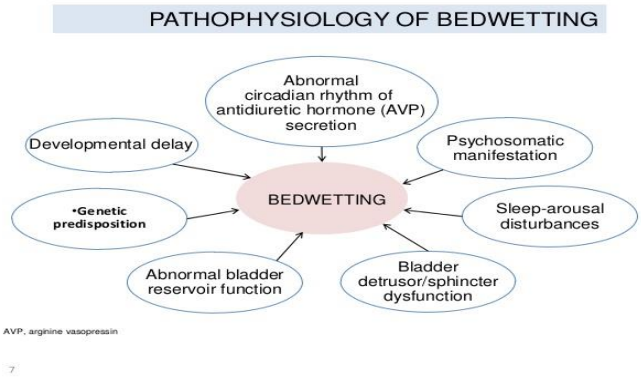
The diagnostic and statistical manual of mental disorders, fifth edition (DSM - 5), classified under the heading elimination disorders. DSM – 5 criteria are as follows:

- Repeated voiding of urine in to bed or clothes, whether involuntary or intentional.
- The behavioural either (a) occurs at least twice a week for at least 3 consecutive months or (b) results in clinically significant distress or social, functional, or academic impairment
- The behaviour cannot be attributed to the physiologic effects of a substance or other medical condition.[6]

  The diagnosis of enuresis is not made in the presence of a neurogenic bladder or another medical condition that causes polyuria or urgency (e.g. untreated diabetes or diabetes insipidus) or during an acute urinary tract infection.

However, a diagnosis is compatible with such condition if urinary incontinence was regularly present prior to the development of another medical condition or if it persists after the institution of appropriate treatment of medical condition. [7]

3.3.4.PATHOPHYSIOLOGY:



Enuresis is usually transmitted in an autosomal dominant fashion. Chromosome 22 identified as the site of enuresis locus in Danish family in 1995. Subsequent reports link enuresis in other families to loci chromosome 8, 12, and 16. The identified gene would have to control a pathophysiologic factor such as arousal, nocturnal polyuria, or bladder capacity.

The exact cause of primary nocturnal enuresis is not clearly known. Nocturnal polyuria along with abnormal release of antidiuretic hormone (ADH) or arginine vasopressin (AVP) important contributor of nocturnal enuresis. Impaired or deficient growth hormone release may inhibit vasopressin release, causing excess urine production at night. They also have functional bladder capacities and high bladder instability at night. [6]

Delayed maturation of the cortical mechanisms that allow voluntary control of the micturition reflex. “deep sleeping” (no specific sleep pattern identified). Enuresis can

occur in any stage of sleep. All children are most difficult to arouse in the 1st third of the night, easiest to awaken in the last third, but enuretic children are difficult to arouse than those with normal control. Enuretic children often are described as "soaking the bed". Genetic factors with chromosome 12 and 13q the likely sites of the gene for enuresis. Family history in enuretic children often positive for enuresis. Organic factors, such as urinary tract infection (UTI) or obstructive uropathy. Psychologic factors more often implicated in secondary enuresis. Sleep apnoea (snoring) secondary to enlarged adenoids. [9]

CLINICAL FEATURES:

Bed wetting may be divided into the persistent (primary) type; in which the child has never been dry at night, and the progressive (secondary) type, in which a child who has been continent for at least 1 year to wet the bed again.

Primary enuresis represents approximately 90% of all cases. Secondary enuresis most frequently occurs between the age of 5 and 8 year and is more common in late- aged children.

Secondary enuresis occur as a result of stressful environmental events, such as move to new home, marital conflict, birth of a sibling, or death in the family, such bedwetting is typically more transitory and has a better prognosis than primary enuresis.

3.3.5.APHORISM 17-18 ORGANON OF MEDICINE

TOTALITY OF SYMPTOMS

Now, as in the cure effected by the removal of the whole of the perceptible sign and symptoms of the disease the internal alteration of the vital force to which the disease is due consequently the whole of the disease – is at the same time removed, 1 it follows that the physician has only to remove the whole of the symptoms in order, at the same time, to abrogate and annihilate the internal change, that is to say, the morbid derangement of the vital force – consequently the totality of the disease, the disease itself. 2 but when the disease is annihilated the health is restored, and this is the highest, the sole aim of the physician who knows the true object of his mission, which consists not in learned – surrounding prating, but in giving aid to the sick.(10)

From this indubitable truth , that besides the totality of the symptoms nothing can by any means be discovered in disease wherewith they could express their of aid, it follows undeniably that the sum of all symptoms in each individual case of disease must be the sole indication, the sole guide to direct us in the choice of a remedy. (Hahnemann Samuel. Organon of medicine.5th & 6th edition. B publications).

INVESTIGATION:

Careful history either physical or laboratory examination is important in primary or secondary enuresis.

- On physical examination should examine for spinal abnormalities. By history or x ray of dorso-lumbar spine ultrasonography should be done.
- To exclude abnormalities of urinary tract yurodynamic study is indicated in both diurnal and nocturnal enuresis especially in voiding difficulty.

- To ruleout infection and diabetes mellitus urine culture and analysis should be done.

MANAGEMENT:

Both Auxillary management and medicinal management are available to solve the problem. No active treatment is required below 6 years of age.

a) **Auxillary management:**

- Motivational therapy:
  - Keep diary of wet and dry nights
  - Void urine before going to bed.
  - Change wet clothes and bedding.
  - Restrict fluids, especially caffeinated drinks like tea, coffee, and soda in evening.
  - Punishments and angry parental responses to be avoided
  - Rewarding child for being dry at night. Parents should maintain chart and rewards should given for increasing success.

b) **Alarm therapy:**

- Involve one of several bedwetting alarms. So, bell rings when few drops of urine touch the mattress. Thus awakens the child and eliciting reflex inhibition of micturition. Gradually after a period of 4-6 months the child starts wakening up to the sensation of full bladder.

3.3.6.INDICATION OF REMEDIES FOR NOCTURNAL ENURESIS:

CALCAREA CARBONICUM:

Dark, brown, sour, fetid, abundant, with white sediment, bloody, irritable bladder. Enuresis.[11]

CAUSTICUM:

Involuntary when coughing, sneezing. Expelled very slowly, and sometimes retained involuntary during first sleep at night; also from slightest excitement. Retention after surgical operations. Loss of sensibility on passing urine.

SEPIA:

Red, adhesive, sand in urine. Involuntary urination, during first sleep. Chronic cystitis, slow micturition, with bearing down sensation above pubis.

LYCOPODIUM CLAVATUM:

Pain in back before urinating; ceases after flow; slow in coming, must strain. Retention polyuria during the night. Heavy red sediment. Cries before urinating.

SULPHUR:

Frequent micturition, especially at night. Enuresis, especially in scrofulous, untidy children. Burning in urethra during micturition, lasts long after, mucus and pus in urine; parts sore over which it passes. Great quantities of colourless urine.

KREOSOTUM:

Offensive. Violent itching in vulva and vagina, worse when urinating. Can urinate only when lying; cannot get out of bed quick enough during first sleep. Dream of urinating. Enuresis in the first part of night. Must hurry when desire comes to urinate.

MEDORRHINUM:

Painful tenesmus when urinating. Nocturnal enuresis. Renal colic. Urine flows very slowly.

SILICEA:

Bloody, involuntary, with red or yellow sediment. Prostatic fluid discharged when straining at stool. Nocturnal enuresis in children with worms.

EQUISETUM:

Incontinence in children, with dreams or night –mares when passing urine. Involuntary urination.

BENZOICUM ACIDUM:

Repulsive odour; changeable colour; brown, acid, enuresis; dribbling offensive urine of old men. Excess of uric acid. Vesical catarrh from suppressed gonorrhoea. Cystitis.

4.0.MATERIALS AND METHODS

4.1.STUDY SETTING:

30 cases presenting with nocturnal enuresis obtained from the OPD and IPD and rural centers of Sarada Krishna Homoeopathic Medical College Hospital.

4.2.SELECTION OF SAMPLES:

With a sample size of 30 of patients with nocturnal enuresis were selected using purposive sampling technique.

4.3.INCLUSION CRITERIA:

- Patients of age between 5 and 18 years.
- Both sexes are included
- Diagnostic criteria is based on the clinical presentation
- Improvement criteria is based on the scoring chart.

4.4.EXCLUSION CRITERIA:

- Children affected with type 1 diabetes mellitus
- Children under treatment of diuretic medicine
- Children suffering from other chronic diseases.

4.5.STUDY DESIGN:

- Prescription is based on totality of the symptoms.
- Improvement criteria of the patient assessed by symptomatic relief.

4.6.INTERVENTION:

- Case taking, selection and administration of medicine according to homoeopathic principles.
- Pre-post test assessment using score chart.

4.7.SELECTION OF TOOLS:

- Acute and chronic case sheet of
- Pre and post score chart for assessment of nocturnal enuresis
- Diagnosis based on clinical symptoms.

4.8. BRIEF OF PROCEDURES:

30 cases presenting with nocturnal enuresis and those which satisfy the inclusion criteria of the study was obtained from OPD, IPD and rural centers of Sarada Krishna Homoeopathic Medical College and the study will be carried out. Pre and post assessment was done using score chart for nocturnal enuresis. Data was obtained from the patients, bystanders, and physician's observation and physical examination according to standararized SKHMC case format. Medicines were prescribed according to the individualisation and totality of symptoms of the case and repertorisation is done if needed. Potency selection and repletion of medicine were done according to the principles laid down in Organon of medicine. The improvement was monitored after 3 to 6 months of administration of medicine by recording the variation in the score chart. Observation were noted in tables and charts. Statistical analysis was done and results were presented.

4.9. OUTCOME ASSESSMENT:

- The effectiveness of homoeopathic treatment will be assessed based on improvement in the nocturnal enuresis according to the variation in the scoring chart, after prescribing homoeopathic medicines using symptom similarity of the case.

4.10.DATA COLLECTION:

Interview technique including case taking based on the direction in Organon of Medicine in pre structured case format. Data will be obtained from the patients, bystanders, and physician's observation and from physical examinations. Nocturnal enuresis in children assessed by scoring chart.

4.11. STATISTICAL TECHNIQUE AND DATA ANALYSIS:

- Pre-test and post test assessment of the individual by "t" test.

4.12. ETHICAL ISSUES IF ANY:

Ethical clearance has been obtained from Sarada Krishna Homoeopathic Ethical Clearance Committee.

5.0 OBSERVATIONS, RESULTS AND STATISTICAL ANALYSIS

A sample of 30 cases obtained from the patients who attended the OPD and IPD of Sarada Krishna Homoeopathic Medical College and Hospital was taken for this study. The children with nocturnal enuresis were selected for the study, according to the score chart used for the study. The constitutional medicine is selected according to the symptomatology of the patient. Individual Homoeopathic medicine were prescribed for each case and followed up for 6 months and subjected to statistical study. The results are presented on the basis of data obtained from study group. The following tables and charts reveal the observations and results of this study.

5.1 DISTRIBUTION OF CASES ACCORDING TO AGE

Out of 30 cases 8 patient of 26.6% of age 5. 3 patient of age 6 with 10%, 2 patients of 6.6%with 7 years old, 1 patient of 3.3% of 8 years old,4 patient of 13.3% with 9 years old,3 patient of 10% of 3 years old 1 patient of 3.3% of 11 years old, 2 patients of 6.6% with 12 years old,2 patients of 6.6% of 13 years, 2 patients of 6.6% with 14 years old, 2 patients of 6.6% with 15 years old.

Table No –1 classifying cases according to the age

AGE	NUMBER OF PATIENTS	PERCENTAGE
5	8	26.6%
6	3	10%
7	2	6.6%
8	1	3.3%
9	4	13.3%

10	3	10%
11	1	3.3%
12	2	6.6%
13	2	6.6%
14	2	6.6%
15	2	6.6%

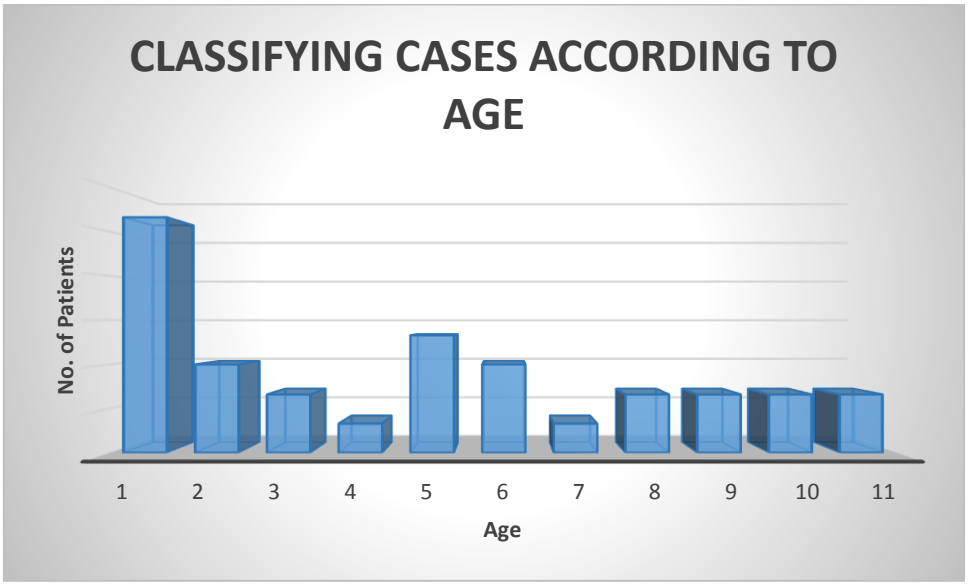


Figure 1

5.2 DISTRIBUTION OF CASES ACCORDING TO SEX

Among 30 cases 18 were (60%) are female and 12 (40%) were male.

Table No – 2 classifying cases according to sex

GENDER	FEMALE	MALE	TOTAL
NUMDER OF PATIENTS	18	12	30

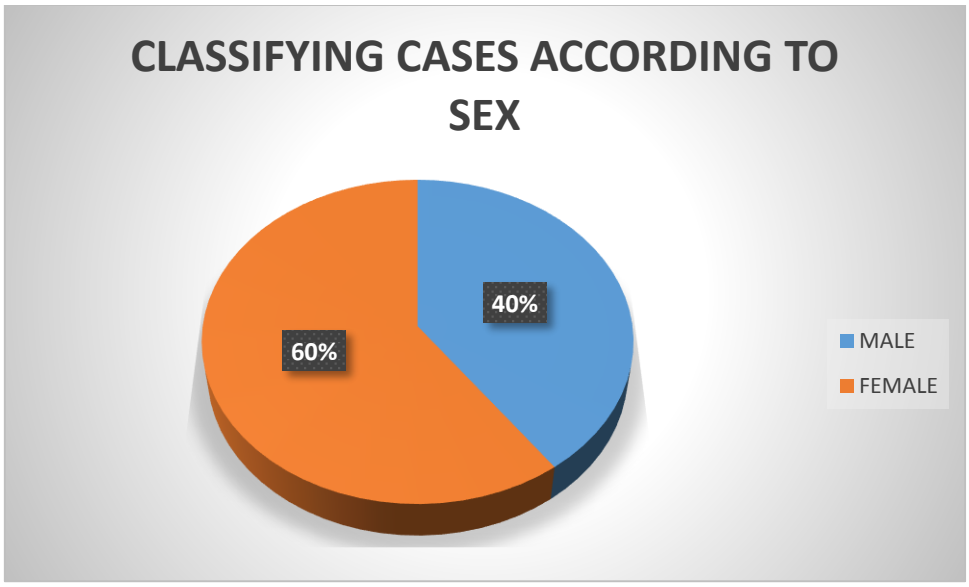


Figure 2

5.3 DISTRIBUTION OF CASES ACCORDING TO PROBABLE CAUSE

Out of 30 cases the probable cause of patient with natal cause are 5 with 16.6 percent.in environmental cause the number of patient are 15 of 50 percentage. In unknown cause the number of patient are 10 and its percentage are 33.3.

Table No – 3 classifying cases according to the probable cause of nocturnal enuresis

PROBABLE CAUSE	Natal	environment cause	unknown cause
NUMBER OF PATIENTS	5	15	10
PERCENTAGE	16.6	50	33.3

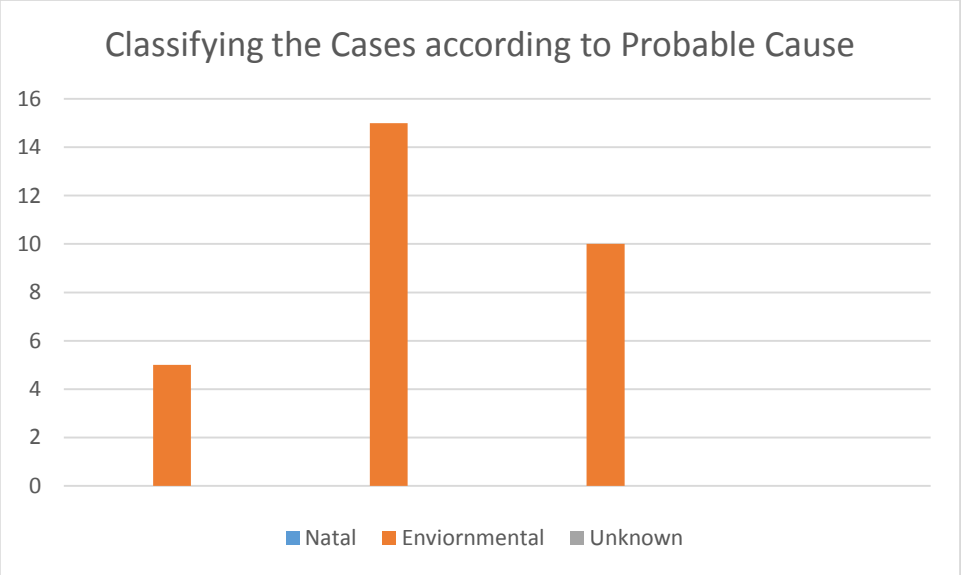


Figure 3

5.4 DISTRIBUTION OF CASES ACCORDING TO PAST HISTORY

Out of 30 patients 11 patients were unknown cause with 37%, 4 patient were UTI with 14% , 3 patient with pneumonia with 10%, 6 patients were measles with 20%, 2 patient were dust allergy with 7%, 2 patients were dengue with 7%.

Table no: 4 Distribution Of Cases According To Past History

Causes	Number of patients	Percentage
Unknown	11	36.6%
UTI	4	13.3%
Pneumonia	3	10%
Measles	6	20%
Dust allergy	2	6.6%
Dengue	2	6.6%

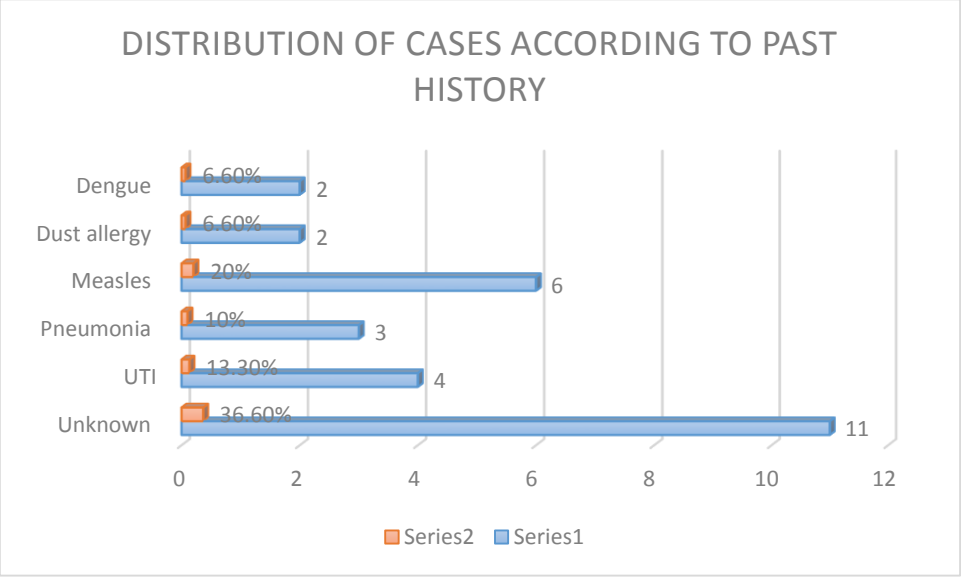


Figure 5

5.5. DISTIBUTION OF CASES ACCORDING TO DELAYED MILESTONES

Out of 30 cases the delayed milestones of patient with delayed walking are 5 with 17%. The patient with delayed head holding are 3 with 10%. The patient with delayed social smile are 4 with 14%. The patient with rollover delayed are 2 with 7% and the patient with normal milestones are 16 with 54%.

Table no: 5 Distibution Of Cases According To Delayed Milestones

Milestones	Number of patients	Percentage
Walking	5	17%
Head holding	3	10%
Social smile	4	14%
Roll over	2	7%
Normal	16	54%

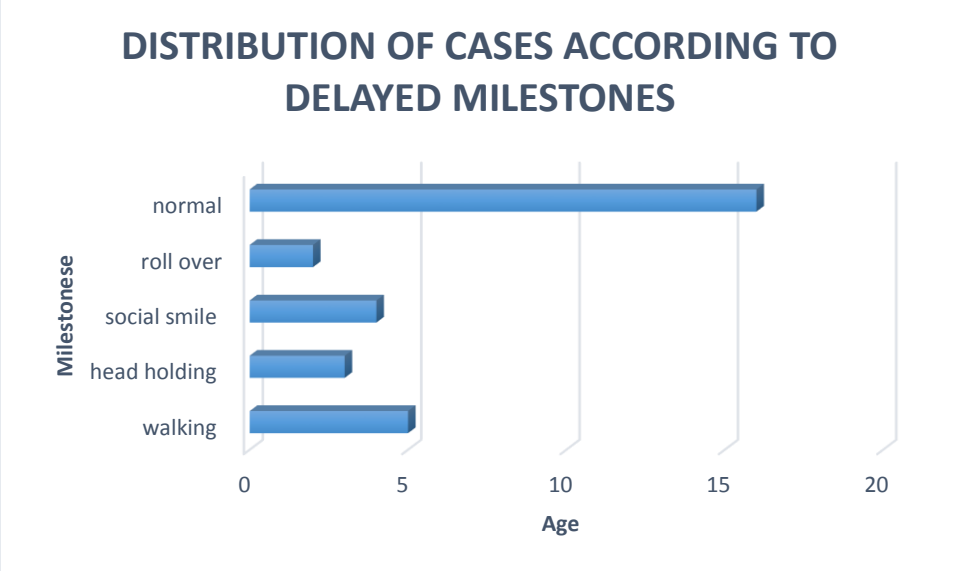


Figure 5

5.6.DISTRIBUTION OF CASES ACCORDING TO PRIMARY AND SECONDARY TYPES OF NOCTURNAL ENURESIS

Out of 30 cases the patient with primary type are 15 patient with 50% and the patient with secondary type are 15 patient with 50%.

Table no: 6 Distribution Of Cases According To Primary And Secondary Types Of Nocturnal Enuresis

Types	Number of patients	Percentage
Primary	15	50%
Secondary	15	50%

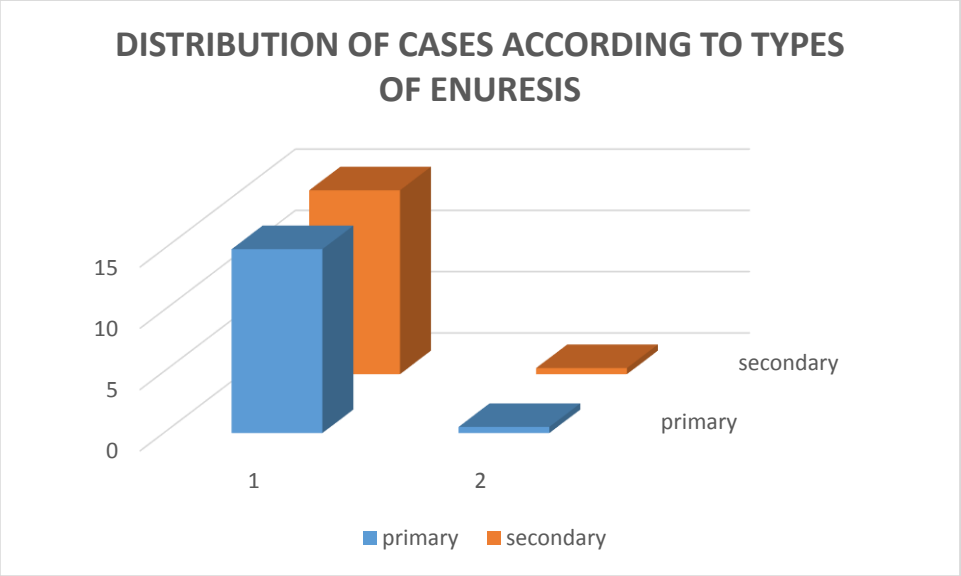


Figure 6

5.7.DISTRIBUTION OF CASES ACCORDING TO CONSTITUTION REMEDIES.

Out of 30 cases Calcarea carb in 6 patient and 20 percentage, Natrum mur in 3 patients and 10 percentage and ,Calcarea phos in 2 patients and 7 percentage , Silicea in 2 patients of 7 percentage, Nux vomica in 2 patients 7 percentage, Calcarea ars in 2 patients and 7 percentage, Tuberculinum in 1 patient and 3 percent, Pulsatilla in 1 patient and 7 percentage, Lycopodium in 1 patient and 3 percent, Arsenicum album in 1 patient and 3 percentage, phosphorus in 1 patient and 3 percent, Sulphur in 1 patient and 3 percentage, sepia in 1 patient and 3 percent, belladonna in 1 patient and 3 percentage, Tarentula in 1 patient and 3 percentage, Medorrhinum in 1 patient and 3 percentage as a constitutional medicines.

Table No: 7 Classifying Cases according to constitutional remedies

Drugs	**Number of patients**	**%**
Calcarea carbonicum	6	20%
Natrum muriaticum	3	10%
Calcarea phosphoricum	2	7%
Silicea	2	7%
Nuxvomica	2	7%
Calcarea arsenicum	2	7%
Tuberculinum	1	3%
Pulsatilla	1	3%
Lycopodium	1	3%
Arsenicum album	1	3%
Phosphorus	1	3%
Sulphur	1	3%
Sepia	1	3%
Belladonna	1	3%
Tarentula	1	3%
Medorrhinum	1	3%

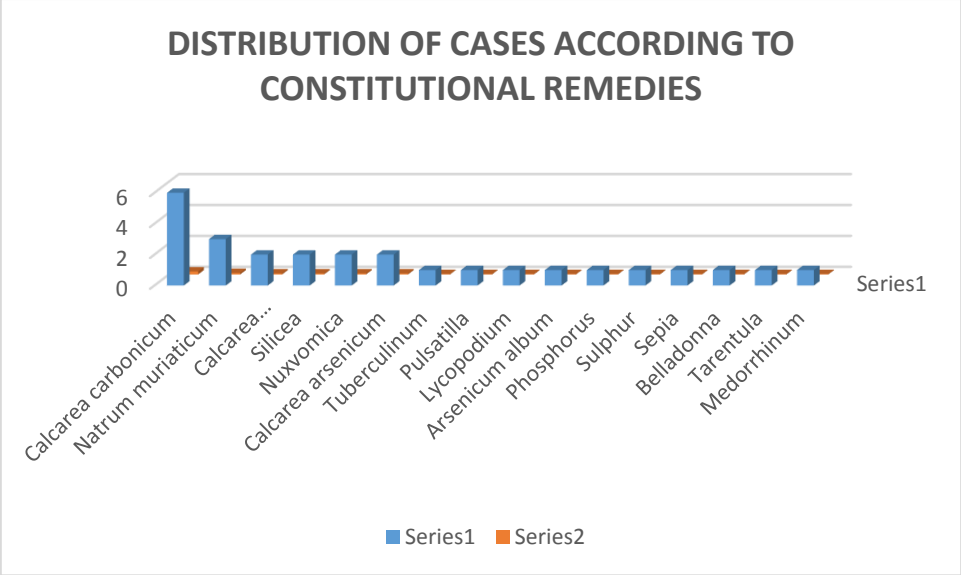


Figure 4

5.8.DISTRIBUTION OF CASES ACCORDING TO THE POTENCY

Out of 30 cases 5 cases of 17% cases are 50 millesimal scale and 25 cases are centesimal scale of 84%.

Table No – 8 classifying cases according the potency selected

Potency	50 Millesimal	Centesimal
Number of patients	5	25
Percentage	17%	84%

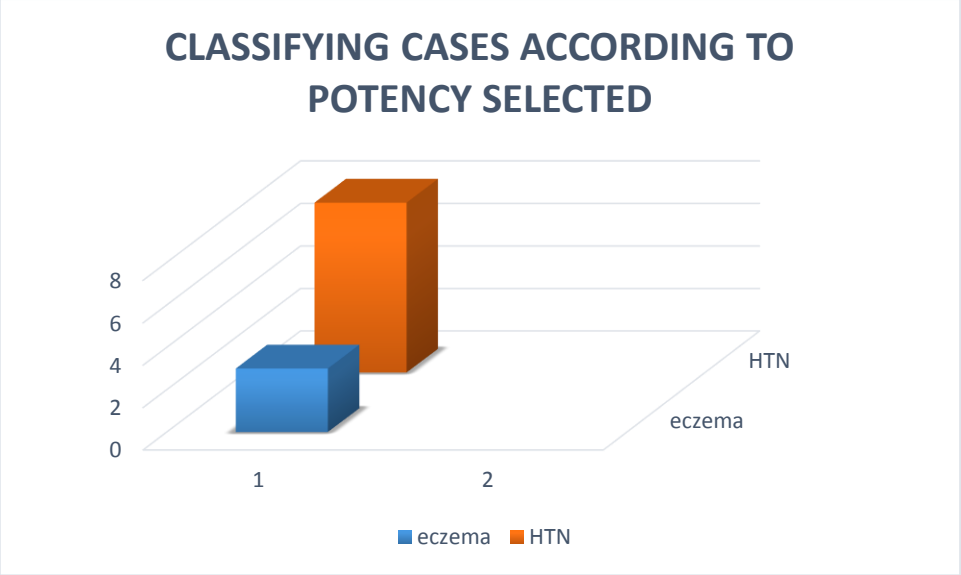


Figure 8

5.8..DISTRIBUTION OF CASES ACCORDING TO PRE-TEST

Out of 30 cases pre-test of 12 patients with 40%, 5 patients with 16%, 12 patients with 40% and 1 patient with 4%.

Table No – 8 Distribution of cases according to pre-test

Pre- test	Number of patients	Percentage
9	12	40
11	5	16
7	12	40
10	1	4

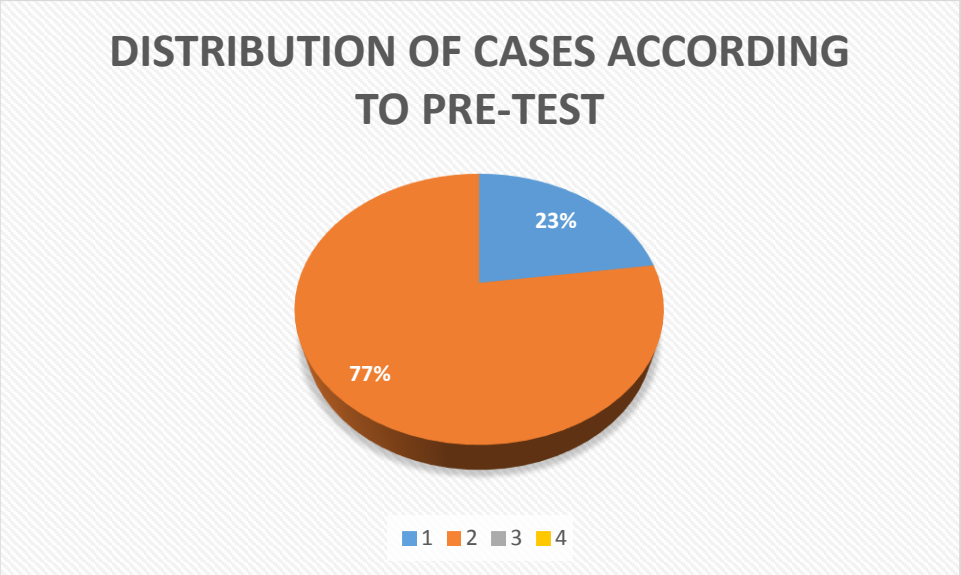


Figure 8

5.9. DISTRIBUTION OF CASES ACCORDING TO POST-TEST

Out of 30 cases 9 cases with 30%, 13 cases with moderate improvement and 44%, 8 cases with mild improvement and 27%.

Table no:9 Distribution of cases according to post –test

Post test	Number of patients	Percentage
0	9	30
1	13	44
2	8	27

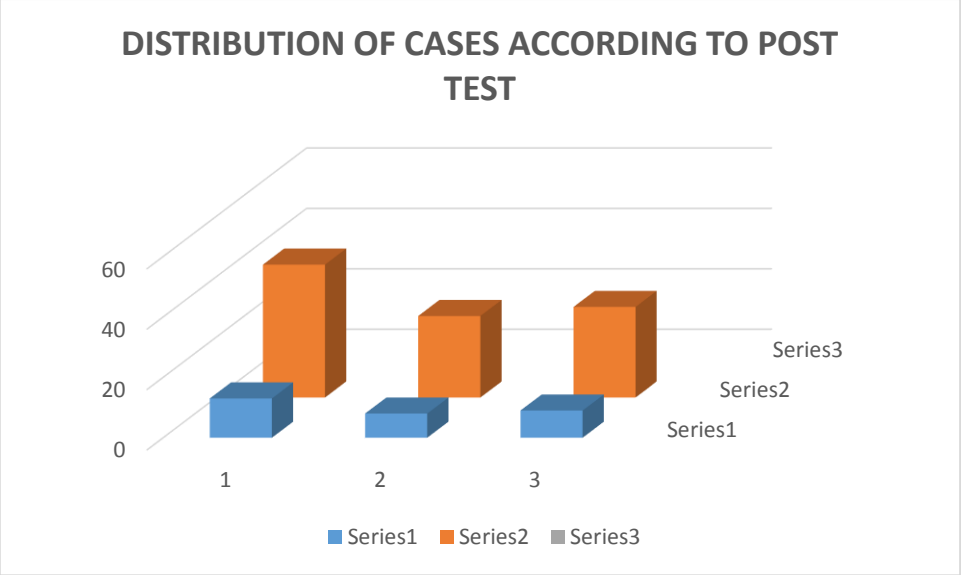


Figure 10

5.10. DISTRIBUTION OF CASES ACCORDING TO IMPROVEMENT OF THE PATIENT

Out of 30 patients 9 patients with good improvement and 30%, 13 patients with moderate improvement and 44% and 8 patients with mild improvement and 27%.

Table no:10 Distribution Of Cases According To Improvement Of The Patient

	Mild improvement	Moderate improvement	Good improvement
Number of patients	13	8	9
Percentage	44	27	30

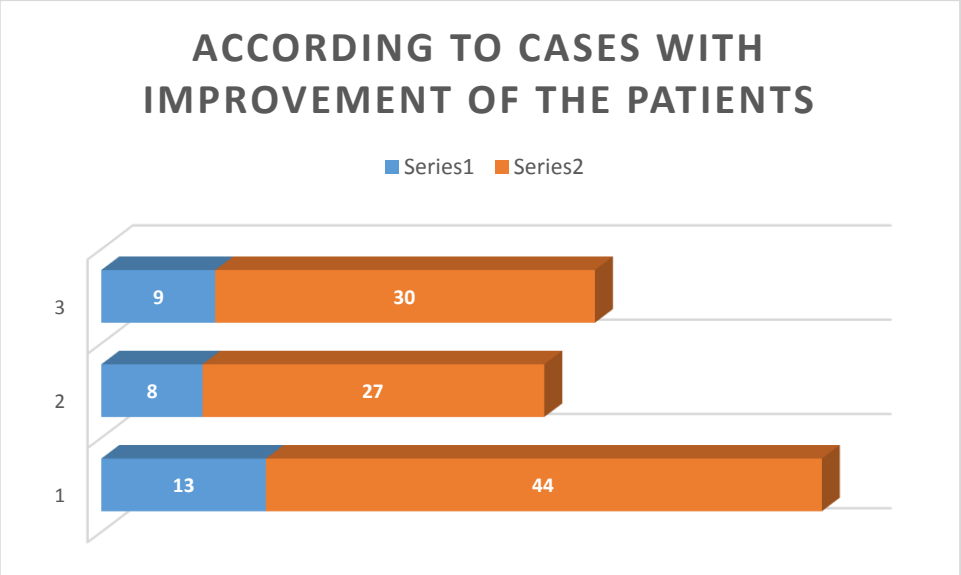


Figure 10

RESULT

- To assess the role of Homoeopathy in the management of nocturnal enuresis in children.
- To find out the more indicated Homoeopathic medicine in nocturnal enuresis

TABLE5.10 SHOW THE STATISTICS APPROCH THE STUDY

Finally the result shows that the homoeopathy is effective in treating nocturnal enuresis. A vast improvement was seen in this. In future with remedial measures homoeopathic treatment are also effective in treating the patient with nocturnal enuresis.

5.1. STATISTICAL ANALYSIS

Sl. No	X	Y	d = x-y	d-d	$(d-d)^2$
1.	9	2	7	-0.6	0.36
2.	7	1	6	-1.6	2.56
3.	9	2	7	-0.6	0.36
4.	7	2	5	-2.6	6.76
5.	7	1	6	-1.6	2.56
6.	9	1	8	0.4	0.16
7.	7	0	7	-0.6	0.36
8.	9	0	9	1.4	1.96
9.	7	1	6	-1.6	2.56
10.	7	0	7	-0.6	0.36
11.	11	1	10	2.4	5.76
12.	9	2	7	-0.6	0.36
13.	7	1	6	-1.6	2.56
14.	11	0	11	3.4	11.56
15.	9	2	7	-0.6	0.36
16.	9	0	9	1.4	1.96
17.	7	1	6	-1.6	2.56
18.	11	1	10	2.4	5.76
19.	9	2	7	-0.6	0.36
20.	7	0	7	-0.6	0.36
21.	9	0	9	1.4	1.96
22.	10	1	9	1.4	1.96

23.	7	1	6	-1.6	2.56
24.	9	2	7	-0.6	0.36
25.	11	1	10	2.4	5.76
26.	7	0	7	-0.6	0.36
27.	11	2	9	1.4	1.96
28.	9	1	8	0.4	0.16
29.	9	0	9	1.4	1.96
30.	7	1	6	-1.6	2.56

X = Score before treatment

Y= Score after treatment

D = Mean difference

Is there any difference between the scores taken before and after the Homoeopathic treatment?

A. **Null Hypothesis:**

There is no difference between the scores taken before and after the Homoeopathic treatment.

$\sum d = 228$

$\bar{d} = 288/ 30 = 7.6$

$\sum d-\bar{d} = 1.2$

$\sum (d-\bar{d})^2 = 69.2$

B. Standard error of the mean differences:

The mean of the differences, $\bar{d} = \Sigma d/n = 228/30 = 7.6$

The estimate of population standard deviation is given by,

$$SD = \sqrt{\Sigma(d1 - \bar{d}1)^2 / n - 1}$$

$$= \sqrt{69.2/29} =$$

$$= \sqrt{0.2868} = 0.53$$

The estimate of standard error of mean, Standard error (S.E)

$= S.D/\sqrt{n} = 0.53/\sqrt{30} = 2.902929$

D. The test statistics is Paired t:

Critical ratio, $t = \frac{\bar{d}}{S.D/\sqrt{n}}$

= 7.6/ 2.902

= 26.18383528

t-Test: Paired Two Sample for Means

	Variable 1	*Variable 2*
Mean	8.566667	0.966667
Variance	2.185057	0.585057
Observations	30	30
Pearson Correlation	0.169772	
Hypothesized Mean Difference	0	
Df	29	
t Stat	26.9476	

P(T<=t) one-tail	2.22E-22	
t Critical one-tail	1.699127	
P(T<=t) two-tail	4.45E-22	
t Critical two-tail	2.04523	

E. Interpretation of results:

Comparison with the tabled value:

On comparing the score before and after treatment the means were 8.56 and 0.966667 and the variances were 2.185057 and 0.585057 respectively. The data showed a positive correlation of 0. Since the calculated value is greater than the tabled value at 5% and 1% the null hypothesis is rejected at 95% significance and hypothesis that Homoeopathy is effective in treating nocturnal enuresis in children.

Interferences:

The study provide an evidence to show that there is significant improvement in nocturnal enuresis with Homoeopathy.

7.0 DISCUSSION

The study was conducted on the patients in a systemic way to fulfill the aim and objectives of the study. The sample of 30 cases were selected who attended the OPD and IPD of Sarada Krishna Homoeopathic Medical College, to study role of homoeopathic medicine in managing nocturnal enuresis in children.

A total of 30 cases were selected as per the inclusion criteria and details of cases were recorded in standardized case record. The symptoms were analyzed and according to the totality constitutional medicine was prescribed.. The cases were followed for a period of 6 months and improvement was assessed using scoring chart. Observations were recorded before treatment scores were compared with after treatment scores and paired "t" test was done to study the effectiveness of homoeopathic medicines in managing nocturnal enuresis in children.

AGE:

Nocturnal enuresis is the incontinence of urine at night. The children are screened and to check whether it is primary or secondary cause that causes enuresis in children. Out of 30 cases 8 patient of 26.6% of age 5. 3 patient of age 6 with 10%, 2 patients of 6.6%with 7 years old, 1 patient of 3.3% of 8 years old, 4 patient of 13.3% with 9 years old,3 patient of 10% of 3 years old 1 patient of 3.3% of 11 years old, 2 patients of 6.6% with 12 years old,2 patients of 6.6% of 13 years, 2 patients of 6.6% with 14 years old, 2 patients of 6.6% with 15 years old.

SEX:

The medical literature existing shows that there is no gender differences observed nocturnal enuresis in children. Among 30 cases 18 were (60%) are female and 12 (40%) were male.

PROBABLE CAUSE OF THE PROBLEM:

Out of 30 cases the probable cause of patient with natal cause are 5 with 16.6 percent.in environmental cause the number of patient are 15 of 50 percentage. In unknown cause the number of patient are 10 and its percentage are 33.3.

REMEDY:

In my study Out of 30 cases phosphorous in 4 patient and 13 percentage, Calcarea Carbonicum in 8 patients and 13 percentage and, Lycopodium in 5 patients 17 percentage ,Silicea in 4 patients of 13 percentage , Nux vomica in 2 patients 7 percentage, Calcarea phosphoricum in 2 patients and 7 percentage, Causticum in 1 patient and 3 percent, Mercurius Solibus in 1 patient and 7 percentage and Natrum muriaticum in 1 patient and 3 percentage as a constitutional medicines. Calcarea carb is the predominant drug.

POTENCY

In my study according to the potency Out of 30 cases 13 cases of 43% cases are 50 millesimal scale.9 case are millesimal scale of 30% and 8 cases are centesimal scale of 27%.most commonly used potency are 50 millesimal scale

IMPROVEMENT CRITERIA

After duration of 6months on homoeopathic treatment using constitutional remedy. Out of 30 cases, no cases are seen in complains aggravation,1 patient seen in same complains of 3 percentage.18 cases improves with mild improvement of 60% percentage.8 cases with moderate improvement with 27%.3 cases improve with good improvement of 10% percent.

8.0. LIMITATIONS

- Number of samples used in this study is very small. Therefore, generalization of the result and inferences of the study need to be done cautiously.
- Selections of cases were difficult since many of the cases were irregular for reporting, some of them even dropped out and the patients after relieving from complaint mostly will not get follow up.
- There was no control group since the sample size was small.

8.1 RECOMMENDATIONS

- Bigger sample size with extended time of research would provide better results.
- It will be always scientific if control (placebo) group would have been kept simultaneously to verify the effectiveness of treatment.
- More number of nocturnal enuresis cases comes under unknown cause.so more research needed in this field.

9.0 CONCLUSION

A sample of 30 cases selected from patients who visited the OPD of Sarada Krishna Homoeopathic Medical College and Hospital were selected as per the inclusion criteria. Conclusions were made after a statistical analysis of cases with nocturnal enuresis. The following conclusions were drawn from the study as follows:

- Majority of patients belong to age groups 5years to 18 years
- Majority of screened students were 12 males and 18 females.
- Majority of the students with nocturnal enuresis have unknown causes so the research should focus on the cause of nocturnal enuresis in future
- Calcarea carb is the most suited constitutional remedies
- Homoeopathy shows effectiveness in managing nocturnal enuresis.

10.0 SUMMARY

A sample of 30 cases from the patients who visited Sarada Krishna Homoeopathic Medical College and Hospital OPD and IPD were selected randomly as per the inclusion and exclusion criteria. The screening was done. Constitutional prescription was given to patients with nocturnal enuresis. The cases were followed for a period of 6 months. The study was subjected to statistical analysis and results were made from the observations. On the basis of comparison of before treatment and after treatment scores in improvement criteria, it shows that homoeopathy is effective in managing nocturnal enuresis in children.

11.0.BIBILIOGRAPHY:

1. BD chaurasia's human anatomy regional and applied dissection and clinical 5th edition vol 2 CBS publishers & distribution pvt Ltd
2. Guyton & hall, textbook of medical physiology, 10th edition, published by elsevier, a division of reed Elsevier India Private limited
3. https://www.myvmc.com/diseases/bed-wetting/
4. (http://www.indianjnephrol.org/article.asp?issn=0971-4065;year=2017;volume=27;issue=6;)
5. www.indianjnephrol.org/article
6. http://emedicine.medscape.com.
7. http:/www.icd10data.com/ICD10CM/codes/N00-N99/N30-39/N39-/N39.44.
8. https://www.google.co.in/search?q=image+of+clinical+features+of+nocturnal+enuresis
9. Kleigman, Behrman, Jenson, Stanton, Nelson's textbook of paediatrics II edition Vol II; published by elsevie, a division of reed elseive India private limited part XIV.
10. Hahnemann Samuel. Organon of medicine.5th & 6th edition. B publications.
11. William boericke homoeopathic materia medica
12. J.T. Kent Repertory of the homoeopathic materia medica, published by B.Jain publishers (P) LTD.

Appendix – I

"Case records are our valuable asset"

SARADA KRISHNA

HOMOEOPATHIC MEDICAL COLLEGE & HOSPITAL

KULASEKHARAM, KANYAKUMARI DIST, TAMIL NADU- 629161

CHRONIC CASE RECORD

O.P. No: UNIT : Date:

Name:

Age: Sex: Religion: Nationality:

Name of father/Spouse/Guardian/Son/Daughter:

Marital status:

Occupation:

Family size:

Diet:

Address:

Phone No (Mobile):

FINAL DIAGNOSIS:

Homoeopathic	
Disease	**NOCTURNAL ENURESIS**

RESULT:	Cured	Relieved	Referred	Otherwise	Expired

2**. INITIAL PRESENTATION OF ILLNESS**

PATIENT'S NARRATIC (in the very expressions us by him/her)	PHYSICIAN'S INTEROGATION (details Regarding symptoms narrated	PHYSICIAN,S OBSERVATION

.

3. PRESENTING COMPLAINTS

LOCATION	SENSATION	MODALITY	CONCOMITANTS

4. HISTORY OF PRESENTING ILLNESS:

5. HISTORY OF PREVIOUS ILLNESS

6. HISTORY OF FAMILY ILLNESS

7. PERSONAL HISTORY

A. LIFE SITUATION

Place of birth:

Socio- economic status:

Nutritional status:

Dwelling:

Religion:

Educational status :

Marital status:

Family status:

Father: ; Mother: Siblings: Male: Children:

B. HABITS & HOBBIES

Food:

Addictions:

Sleep:

Artistic:

C. DOMESTIC RELATIONS

With family members:

With other relatives:

With neighbours/friends/colleagues:

8. LIFE SPACE INVESTIGATION

9. MENSTRUAL HISTORY:

10. OBSTETICAL HISTORY:

11. GENERAL SYMPTOMS:

A. PHYSICALS

I. FUNCTIONAL

1. Appetite :

2. Thirst :

3.Sleep :

II. ELIMINATIONS

1. Stool :
2. Urine :
3. Sweat :

III . REACTIONS TO

1. Time :

2.Thermal :

3.Season :

4.Covering :

5.Bathing :

6.Desire :

IV . CONSTITUTIONAL

C. MENTAL GENERAL

12. PHYSICAL EXAMINATION

A) GENERAL

- Conscious :
- General appearance:
- General built and nutrition:
- Anaemia:
- Jaundice:
- Clubbing:
- Cyanosis:
- Oedema :
- Lymphadenopathy:
- Pulse rate: Resp rate: B.P:
- Temp:

B.SYSTEMIC EXAMINATION

1.Respiratory system:

2.Cardiovascular system:

3.Gastro Intestinal system:

4.Urogenital system:

5. Skin and glands :

6. Musculoskeletal system

7.Central Nervous system:

8 . Endocrine:

9.Eye and ENT:

10.Others:

C.REGIONALS

13. LABORATORY FINDINGS

14. DIAGNOSIS

- Provisional Diagnosis :
- Differential Diagnosis:

- Final Diagnosis (Disease):

15 .DATA PROCESSING

A . ANALYSIS OF CASE

COMMON	UNCOMMON

B. EVALUATION OF SYMPTOMS/TOTALITY OF SYMPTOMS

C. MIASMATIC ANALYSIS:

PSORA	SYCOSIS	SYPHILIS

D. TOTALITY OF SYMPTOMS

E. HOMOEOPATHIC DIAGNOSIS

16 . SELECTION OF MEDICINE

A. Non Repertorial Approach

B. Repertorial Approach

17. SELECTION OF POTENCY AND DOSE

A. Potency

B. Dose

18. PRESCRIPTION

19.GENERAL MANAGEMENT INCLUDING AUXILLARY MEASURES

A. General/Surgical/Accessory:

B. Restrictions (Diet, Regimen etc.):

Disease	Medicinal

16. PROGRESS AND FOLLOWUP:

Date	Symptom Changes	Inference	Prescription

Appendix – II

SCORING CHART FOR NOCTURNAL ENURESIS:

SYMPTOMS	ABSENT	MILD	MODERATE	SEVERE
Frequency of episodes of urinary incontinence	Nil	Once in a week or less	Twice or three times in a week	Severe time per day
perception of the quantity of urine lost	Nil	Low	Moderate	High
Interference in the daily life	Nil	2-3	4-7	8-10

Range of nocturnal enuresis

Mild (0-4)

Moderate (5-8)

Severe (9-12)

Appendix – III

CONSENT FORM (A)

INFORMATION FOR PARTICIPATION OF THE STUDY

1. **Title of the project:** A clinical study on the role of homoeopathic medicine in managing nocturnal enuresis in children.
2. **Name of the investigator/ guide:**

Dr. C.K. MOHAN

Professor

Department Of Paediatrics

Sarada Krishna Homoeopathic Medical College

Kulasekharam

3. **Purpose of this project/study:** To study the effectiveness of homoeopathic medicines in nocturnal enuresis in children..

Procedure/ methods of the study: 30 cases of patient with nocturnal enuresis from the OPD, IPD and rural centers of Sarada Krishna Homoeopathic Medical College Hospital. The case details will be carried in standardized pre structured case format of Sarada Krishna Homoeopathic Medical College. Then the case will be analyzed and the totality will be erected after which symptoms will be evaluated. The cases are repertorised (if needed) and a remedy will be prescribed. Potency and repetition of doses will be done under the homoeopathic principles. Assessment will be done in 15 days interval and the changes were recorded. So there will not be any adverse effect or risk because of the study.

4. **Expected duration of the subject participation:** 3 to 6 months with follow up
5. **The benefits to be expected from the research to the participant or to others and the post trial responsibilities of the investigator:** The participant who takes part in this study are contributing towards the management of children who are suffering with nocturnal enuresis, a treatment which they can attain by without any adverse effect. Through this study the participant get best quality Homoeopathic treatment for their complaints.
6. **Any risks expected from the study to the participant:** For the treatment best selected Homoeopathic medicines will be given. So there will not be any adverse effect effect or risk because of the study.

   Maintenance of confidentiality of records: I will not disclose identity of the research participants at any time, during or after the study period or during publication. Securely store data documents in locked locations and Encrypt identifiable computerized data. All information revealed by you will be kept as strictly confidential.
7. **Freedom to withdraw from the study at any time during the study period without the loss of benefits that the participant would otherwise be entitled:** your participation in the study is voluntary and you are free to refuse treatment or withdraw from the study at any time if you are satisfied.
8. **Possible current and future uses of the biological material and of the data to be generated from the research and if the material is likely to be used for secondary purposes or would be shared with others, this should be mentioned:** Future uses of the biological material and of the data to be

generated from the research and if the material is likely to be used for secondary purposes or will be shared with others only with your consent.

9. **Address and telephone number of the investigator of the investigator and co- investigator /guide:**

Investigator: Dr. Raveena R Lekshmi, PG Scholar

Sarada Krishna Homoeopathic Medical College and Hospital

Kulasekharam

Mobile no. 9042828426

Guide: Dr. C.K. Mohan

Professor

Department Of Paediatrics

Sarada Krishna Homoeopathic Medical College

Kulasekharam, Mobile No: 9443379448

10. **Signature of investigator:**

CONSENT FORM (B)

Participant consent form

Informed Consent form to participate in a clinical trial

Study Title: "A clinical study on the role of Homoeopathy in managing nocturnal enuresis in children"

Study Number:

Subject's Initials: **Subject's Name:**

Date of birth/Age: Please Initial Box (Subject)

i. I confirm that I have read and understood the information sheet dated [ ]
_____ for the above study and have had the opportunity to ask question.

ii. I understood that my participation in the study is voluntary and that I am [ ]
free to withdraw at any time' without giving any reason. Without my medical care or
legal rights being affected.

iii. I understand that the sponsor of the clinical trial,others working on the sponsor's [ ]
behalf the Ethics Committee and the regulatory authorities will not need my permission
to look at my health records both in respect of the current study and any further research

that may be conducted in relation to it, even if I withdraw from the trial. I agree to this access. However, I understand that my identity will not be revealed in any information released to third parties or published.

iv. I agree not to restrict the use of any data or result that arise from this study

[ ]

Provided such a use only for scientific purpose(s)

v. I agree to take part in the above study.

Signature (or Thumb impression of the subject/legally acceptable Representative:_____

Date _____/_____/_____

Signatory's Name: _____

Signature of the Investigator: _____

Study Investigator's Name: Dr Raveena R Lekshmi

Signature of the Witness_____ Date: _____/_____/_____

Signature of the Witness _____Date _____/_____/_____

Appendix – v

"*case records are our valuable asset*"

SARADA KRISHNA

HOMOEOPATHIC MEDICAL COLLEGE & HOSPITAL

KULASEKHARAM, KANYAKUMARI DIST, TAMILNADU – 629161

CHRONIC CASE RECORD

OP.NO : 5070/18 UNIT: V DATE:20/7/2018

Name: Master. Sanjay

Age: 5 yrs Sex: male Religion: Hindu Nationality: Indian

Name of father/spouse/guardian/son/daughter: Mrs. Ranjini

Marital status: Single

Occupation: 7th Std

Family size: 4 Members

Diet: Non Veg

Address: Gramthuvilai, Aruvikkarai

Phone no (mobile):

FINAL DIAGNOSIS:

HOMOEOPATHIC	Chronic Miasmatic Disease – Psora
DISEASE	Nocturnal Enuresis

RESULT	Cured	Relieved	Referred	Otherwise	Expired

2. **INITIAL PRESENTATION OF ILLNESS**

PATIENT'S NARRATION (in the very expression used by him/her)	Physician's interrogation (details regarding symptoms narrated)	Physician's observation

3. PRESENTING COMPLAINTS

LOCATION	SENSATION	MODALITY	CONCOMITANTS
Genitourinary system Since 1 month	- Increased frequency of micturition (every half an hour) - Involuntary	< fear while conducting test paper < fear about school teacher < night	

4. HISTORY OF PRESENTING ILLNESS:

The patient complaint had nocturnal enuresis till 2 and a half year but improved gradually. Now since 1 month enuresis again started. The complaint started after a teacher hurt and scold him at school.

5. HISTORY OF PREVIOUS ILLNESS:

Childhood – jaundice – allopathy- relieved

6. HISTORY OF FAMILY ILLNESS

Mr – bronchial asthma

7. PERSONAL HISTORY

A. LIFE SITUATION

Place of birth: Kulasekharam

Socio-economic status: Moderate

Nutritional status: Good

Dwelling: Aruvikkarai

Religion: Hindu

Educational status: Ist Std

Marital status: -

Family status: Nuclear

Father: Alive Mother: Alive Siblings: 1 Male: 1 Children:

B. HABITS AND HOBBIES:

Food: Non Vegetarian

Addiction: 2 tea / day

Sleep: Good

Artistic:

C. DOMESTIC RELATIONS

With family menbers: Good

With other relatives: Good

With neighbours/ friends/ colleagues: Good

8. LIFE SPACE INVESTIGATION:

The patient was born on a moderate family. She have one younger brother. He is friendly with his brother and very playful and active. He was studying in Ist std. now he was suffering from involuntary urination and increased frequency of micturition since 1 month.

Birth weight – 2.75kg

Had neonatal jaundice (kernicterus) – was in ICU for 10 days

Breast feeding was done till 2yrs of age

At 7th month of pregnancy, had afraid of hearing the death of 2 babies at the time of delivery and also death of another baby nearby hospital.

II. GENERAL SYMPTOMS

A. Physicals:

(i) Functional	(ii) Elimination
Appetite: decreased	Stool: regular
Thirst: normal	Urine: normal
Sex:	Sweat: normal
Sleep: good	Breath:
	Discharges: frequency of micturition, involuntary
	Abnormal secretions & excretions

9. MENSTRUAL HISTORY:

NAD

10. OBSTETRICAL HISTORY

NAD

11. GENERAL SYMPTOMS:

(iv) constitutional: hot

B. mental general:

i) will & emotions including motivation (love, hate, anger, sadness, fear, fright, anxiety, suspicious, cause, modalities, state, aversion and cravings, (excluding for food and drinks, **)** etc.

Desire: company

Always wants mother++

Easily crying

Fear to be alone

Consolation >

Restless

Fear at night

(iii) reactions to: (wherever applicable)	Aversion	Desire	Intolerance/ sensitive to	Aggravation	amelioration
Time					
Thermal					
Season		Rainy			
Meteriological					
Moon phase					
Places					
Fanning		Desire			
Covering	aversion				
Bathing /washing					
Food / drinks		Desire Egg, sweets			
Undigested food					
Touch/ pressure					
Posture					
Motion					
Sleep					
Sex					
Spl.senses					
Elimination					
Menses					

ii) understanding and intelligent (perception, thinking, consciousness, decision, confidence, speech, motivation, cause, modalities, state**)** etc.

perception: good

iii) memory (effect on behavior and function**)**

loss of memory

12. PHYSICAL EXAMINATION

A) General Examination

- Conscious: conscious
- General appearance: normal
- General built and nutrition: normal
- Anemia: no pallor
- Jaundice: not icteric
- Clubbing: nil
- Cyanosis: nil
- Oedema: nil
- Lymphadenopathy: nil
- Pulse rate: 64/min Respiratory Rate: 12/min BP: -
- Temp:98.6º F
- Others: Normal

B. SYSTEMIC EXAMINATION

1. Respiratory System:

NAD

2. Cardiovascular System:

NAD

3. Gastrointestinal System:

NAD

4. Urogenital System:

Inspection: no scar, no discolouration,

Palpation: no palpable swelling, no local warmth.

5. Skin and Glands:

NAD

6. Musculoskeletal System:

NAD

7. Central Nervous System:

NAD

8. Endocrine:

NAD

9: Eye and ENT:

NAD

11. Others:

NAD

C. REGIONALS

Urethra: involuntary urination

13. LABORATORY FINDINGS:

Urine routine:

Colour: normal

Albumin: nil

Sugar: nil

Pus cells: 1-4/HPF

Epithelial cells: 2-3/HPF

RBC/ Cast/ Crystals: nil

14. DIAGNOSIS:

- Provisional Diagnosis:

  NOCTURNAL ENURESIS

- Differential Diagnosis:

  NOCTURNAL ENURESIS

- Final diagnosis (Disease):

15. DATA PROCESSING:

A. ANALYSIS OF CASE:

COMMON SYMPTOMS	UNCOMMON SYMPTOMS
Desire: company Easily weeping Consolation > Desire: rainy season Desire: fanning Desire: covering Desire: cold food and drinks	Always wants his mother near Easily angered Loss of memory Involuntary urination Frequency of urination < fear of school teacher < daytime < night

B. EVALUATION OF SYMPTOMS /TOTALITY OF SYMPTOMS

Mental generals	Physical generals	Particulars
Desire: company Consolation > Always wants her mother Easily angered	Desire: rainy season Desire: cold food and drinks Desire: covering Desire: fanning Appetite: decreased	Involuntary urination and frequency of urination < fear of school teacher < night <for while conducting test paper

C. MIASMATIC ANALYSIS

Miasmatic diagnosis: chronic miasmatic disease: psora

D. TOTALITY OF SYMPTOMS:

Involuntary urination and frequency of urination

< night

< fear teat paper

Loss of memoy

Fear at night

Always wants his mother near

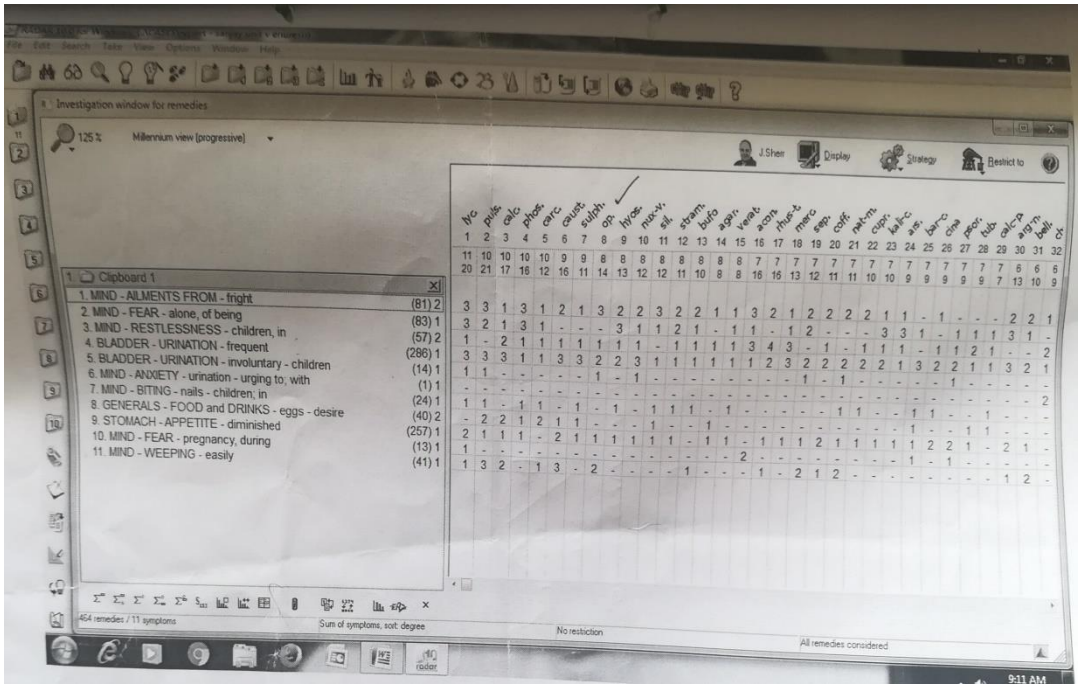
Wants company

16. SELECTION OF MEDICINE:

Rx

LYCOPODIUM CLAVATUM 1M/1DOSE

D. Repertorial approach



17. SELECTION OF POTENCY AND DOSE

Potency: According to the susceptibility of the patient

Dose: According to homoeopathic principle.

18. PRESCRIPTION:

Rx

1. Lycopodium clavatum 1M/1Dose

19. GENERAL MANAGEMENT:

A. General/Surgical/Accessory:

Advice to keep alarm therapy

20. PROGRESS & FOLLOWUP

DATE	SYMPTOM CHANGES	INFERENCE	PRESCRIPTION
31/7/2019	Involuntary Urination persist but feels better Generls: good		**Rx** Lycopodium Clavatum 1M/1Dose
11/08/2018	Involuntary urination feels better Generals: good		**Rx** Lycopodium clavatum 1M/1Dose
22/09/2018	Nocturnal enuresis relieved		**Rx** Lycopodium 1M/1Dose
09/10/2108	Nocturnal enuresis completely relieved		**Rx** Sac lac /1Dose

20/7/18.

5070/18
Master. V.R. Sanjay

Symptoms	Absent(0)	Mild(1)	Moderate(2)	Severe(3)
Frequency of episodes of urinary incontinence	Nil	Once in a week	Twice or three times in aweek ✓	Severe time per day
Perception of quantity of urine lost	Nil	low	moderate ✓	high
Interference in daily life	Nil	2-3 ✓	4-7	8-10
Situatin of urinary incontinence	nil	Mental stress, acute disease codition ✓	8-10	When sleeping

Range of nocturnal enuresis

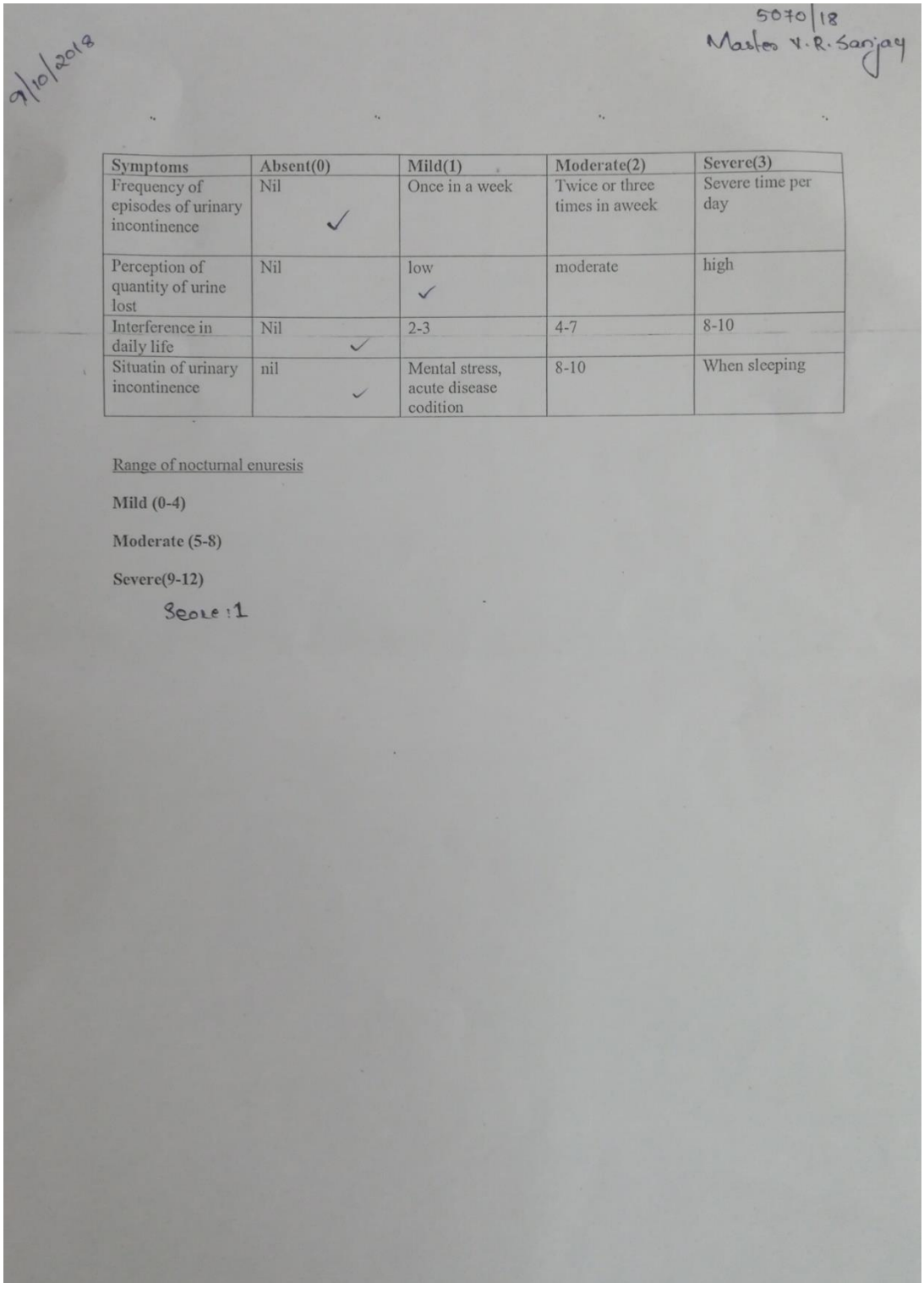
Mild (0-4)

Moderate (5-8)

Severe(9-12)

Moderate NE
Score: 7.

jkjj



9/10/2018

5070/18
Master V.R. Sanjay

Symptoms	Absent(0)	Mild(1)	Moderate(2)	Severe(3)
Frequency of episodes of urinary incontinence	Nil ✓	Once in a week	Twice or three times in aweek	Severe time per day
Perception of quantity of urine lost	Nil	low ✓	moderate	high
Interference in daily life	Nil ✓	2-3	4-7	8-10
Situatin of urinary incontinence	nil ✓	Mental stress, acute disease codition	8-10	When sleeping

Range of nocturnal enuresis

Mild (0-4)

Moderate (5-8)

Severe(9-12)

Score : 1